MANUAL OF COUNTERPOINT

BY

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A

MANUAL OF COUNTERPOINT

FORMING A SEQUEL

TO

PROF. OSCAR PAUL'S MANUAL OF HARMONY

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BY

THEODORE BAKER
PH. D. (LEIPZIG).

NEW YORK

G. SCHIRMER, 35 UNION SQUARE (WEST SIDE).

1887.

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TO MY REVERED TEACHER

OSCAR PAUL, PH. D.

PROFESSOR IN THE UNIVERSITY OF LEIPZIG

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PREFACE.

On taking the step from Harmony to Counterpoint success depends, in great measure, upon the *harmonic foundation*, so to speak, which the pupil may have gained by previous study. A student who thoroughly understands Prof. PAUL'S presentation of the principles of harmony is fully competent to take this step forward with confidence.

Prof. PAUL'S Manual is founded upon HAUPTMANN'S theory of the Interconnection of the Chords, which furnishes a most admirable explanation of their elementary progressions.

But a theory which leaves room for a multitude of exceptions cannot be regarded as covering the ground *now* to be gone over. The Principle of Substitution is the natural outgrowth and extension of the Theory of Interconnection, being based upon the *harmonic equality* of any given tone and its lower or higher octave. Such an extension is required in order to meet the necessity, in contrapuntal combinations, for a freer melodic leading of the individual parts than is possible in progressions of simple chords.

The Principle of Substitution covers the same ground, in contrapuntal *theory*, respecting all progressions of intervals not included

under the Theory of Interconnection, that BACH'S vocal works cover in contrapuntal *practice*; that is, each instance of the preparation and resolution of dissonances found in those works may be explained, logically and completely, by reference to that principle. The Principle of Substitution explains the free progressions of *intervals* as fully and naturally as the Theory of Interconnection explains the progressions of simple *chords*; furthermore, the former leaves as little room for arbitrary rules and exceptions, and is as indispensable (because providing a thorough explanation of, and positive groundwork for, free contrapuntal evolution) as the latter.

It is an open question as to where the line between "strict" and "free" composition should be drawn. As a matter of fact, each theorist follows some pet theory of his own, giving any set of more or less arbitrary rules evolved from the depths of his æsthetic consciousness. This Manual does not profess to teach absolute musical æsthetics. Most disputes among musicians in regard to the "correctness" or "incorrectness" of divers harmonic and melodic progressions arise from a mere divergence of taste; regardless of the musty, yet not obsolete, proverb: *de gustibus non est diputandum.* So many words have been wasted concerning the propriety (in two-part movements) of consecutive major thirds, the permissibility of the perfect fourth and fifth and of the augmented triad in harmonic, and of the augmented intervals generally in melodic, progression, that the author does not feel called upon to prolong the discussion. No branch of musical science has fared worse at the theorists' hands than two-part equal counterpoint: they either apply to it the strait jacket of "consonant intervals", or let it come lagging after the exercises in four and three parts, recognizing its existence, but scarcely admitting its usefulness. The entrance of a dissonance in any form is usually described as an "exception". When such "exceptions" multiply to an inconvenient extent, they are lumped together as renegades unfit for a "strict" or "pure" style. Yet is it

not self-contradictory to limit the two-part movement by such pedantic rules, and at the same time to point to the works of JOHANN SEBASTIAN BACH, which are teeming with examples to the contrary, as worthy models for study and imitation? And what explanation do such theories afford of innumerable progressions in two-part counterpoint found in the scores of BACH and BEETHOVEN, of VOLKMANN and KIEL, or of any ancient or modern composer of original and vigorous conception?

In stating the Principle of Substitution squarely and broadly at the outset, and applying it in all possible forms even to the exercises in two-part equal counterpoint, the author is conscious that his intentions are liable to misconstruction. He begs for indulgent criticism on this head. It was his purpose to illustrate, in these two-part examples, a principle which can be employed, in *polyphonic* writing, to regulate the mutual progression of any two parts, without other restrictions than those imposed by general æsthetic considerations. It is evidently impossible, in view of the wide divergence of opinion, to construct a manual which would satisfy all *tastes*. All that this Manual requires of the teacher is, that he shall teach the doctrine of Substitution based upon Interconnection; that he shall reject any and every form of musical progression opposed to this principle; but leaves to his individual judgment the measure of liberty to be granted to the individual pupil.

To his revered teacher, Prof. PAUL, the author owes an explanation (perhaps apology) for styling this book a sequel to the Professor's Manual of Harmony. Prof. PAUL is in no way responsible for any opinions herein advanced. But the author not only considers the study of the above-mentioned work essential as a preparation for a ready comprehension and assimilation of the principles set forth in the following pages; it was his own firm conviction: that the Theory of Interconnection must form the groundwork of any new departure

in contrapuntal instruction, which led to the formulation of the Principle of Substitution.

The author, far from considering this work to be a *ne plus ultra,* would be grateful for any friendly hints or corrections that experience may suggest. His address is: care of the Publisher.

Boston, U. S. A., November, 1884.

THE AUTHOR.

TABLE OF CONTENTS.

Introduction, pp. 1—3.

Definitions. Counterpoint and Polyphony. Simple and Invertible Counterpoint. General rules.

Part I.

Chapter I, pp. 4—25.

Two-part counterpoint. *Cantus firmus.* Progressions in consonances. The close. Contrary and parallel motion. Perfect intervals. Crossing of parts. Exercises with consonances only. Preparation of dissonances. Principle of Substitution. Resolutions. Exercises with dissonances. Minor mode. Exercises. Unequal counterpoint. Influence of rhythm. Exercises in half-notes; and in quarter-notes.

Chapter II, pp. 25—39.

Three-part counterpoint. Chords. Leading of bass and soprano. "Covered" fifths and octaves. Parallel fourths. Doubled intervals. Exercises in whole notes. Model exercises in half-notes. Leading-note. Analysis of model exercises. Exercises in half-notes. Analysis of models in quarter-notes. Melodic phrasing.

Chapter III, pp. 40—45.

Resolution by substitution in the two, three, and four-part movements.

Chapter IV, pp. 45—57.

Four-part counterpoint. Organic difference between Counterpoint and Harmony. Doubling of leading-note. Exercises in whole, half and quarter-notes, accompanied by analyses of models.

Chapter V, pp. 58—75.

Figurate counterpoint. Rhythm. Two-part exercises in $^4/_4$ and $^3/_4$ time. Eighth-notes. Remarks on *tempo.* Free imitations. Motives and phrases. Free entrance of dissonances. Two-part exercises in free imitation. Three-part figurate counterpoint. Four-part ditto.

Part II.

Chapter VI, pp. 76—98.

Invertible (or Double) counterpoint. Definitions. Invertible counterpoint of the octave. Model exercises. Definition of double, triple and quadruple invertible counterpoint. Three and four-part double invertible counterpoint.

Chapter VII, pp. 98—109.

Triple and quadruple invertible counterpoint of the octave. Chord of the fourth and sixth. Model exercises.

Chapter VIII, pp. 109—119.

Invertible counterpoint of the tenth and twelfth. Of the twelfth. Modulation. BACH'S "Kunst der Fuge". Invertible counterpoint of the tenth. Modulation. Construction of simple Canon.

Chapter IX, pp. 119—125.

The Choral.

Appendix, pp. 126—127.

INTRODUCTION.

The word Counterpoint signifies, in its wider sense, the combination of two or more distinct melodies, or parts, which progress together according to the rules of harmony; in this signification the term Counterpoint is synonymous with Polyphony. In its more restricted, and purely technical, application it is used to denote such a part or parts as may be set, according to harmonic rules, to a given melody, or *cantus firmus*. [See App., Note I.]

Polyphonic compositions are said to be written, according to the number of parts progressing together, in two-part, three-part, or four-part counterpoint; the number of parts can, of course, be still further increased.

The science of Counterpoint embraces two important subdivisions: Simple or Single Counterpoint, and Invertible or Double Counterpoint.

As presented in this Manual, single or simple counterpoint is the art of setting one or more parts to a given melody according to harmonic rules, without reference to the interchangeability of the several parts. It would therefore appear to be much the same as the simple harmonizing of any given melody. In the study and practice of counterpoint, however, more attention is paid to the leading of each individual part than was possible during the study of simple harmony, the aim of which is to make the student acquainted with the formation and progression of the various chords. The fundamental difference between Harmony and Polyphony is this: in the former the chords appear more as masses, or as a support to one melody; whereas, in Polyphony, or Counterpoint, the closest attention must be paid to the *melodic leading of each part*, endeavoring to secure the greatest possible freedom and beauty of melodic progression, while strictly adhering to the laws of harmony. Harmony might be called the science of the progression of *chords*, and Counterpoint the science of the progression of *intervals*. This appears very distinctly in the higher forms of counterpoint: Invertible Counterpoint, Canon, and Fugue. Modern counterpoint is based upon the science of

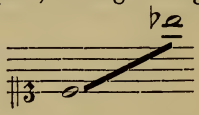
harmony, although in their historical evolution contrapuntal forms preceded harmonic. No haziness or uncertainty should embarrass the student in respect to the structure and relations of the various keys and chords. His attention is again called to the clear and simple rules, especially in regard to the interconnection of the chords, presented in Prof. PAUL's Manual of Harmony, upon which work this manual is based. It can be recommended, not only to beginners, but also to those who have already studied other books on the same subject, as the best and most logical treatise of its class.

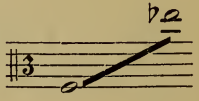
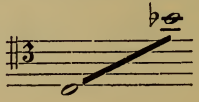
The second subdivision of the science of counterpoint, called Double or Invertible Counterpoint, is the art of combining two or more melodies or parts in such a manner that they may be inverted, *i. e.* change their relative positions, the lower part being set above the higher, or the higher below the lower, without violating, in their simultaneous progression, the laws of strict harmony.

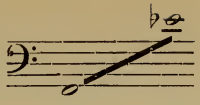
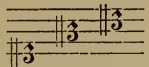
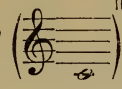
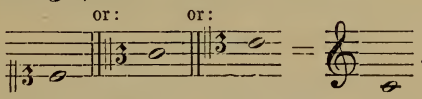
While pursuing his course of contrapuntal study the student should conceive the parts as *sung* rather than as played on any instrument (the piano, for instance); they are consequently subject to the rules for *a cappella* composition (*i. e.* pure vocal score without instrumental accompaniment.) He should never take up a new chapter without being able to hear, unaided by any exterior sound, every note written in the chapter last studied. An observance of this rule is of the highest importance, as without it no lasting benefit can be expected, the study of counterpoint sinking into a mere mechanical counting of the intervals by means of the eye alone.

A few simple rules for vocal composition will be of use to the student in working out the exercises, as well as in any attempts at independent composition. It may be remarked, that they are not intended to be exhaustive.

For vocal (*a cappella*) composition the usual classification of the voices is the following:

1) Soprano or first part, having a range from c' to $b''\flat$, written with the soprano-clef  .

2) Alto or second part, from f to $e''\flat$.

3) Tenor or third part, from c to $b'\flat$  .

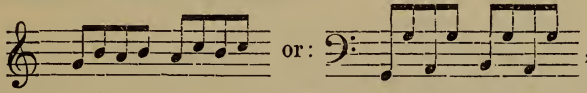
4) Bass or fourth part, from *F* to $e^{\flat}$.

The *C*-clef here employed  locates the position of the so-called "middle *C*"  on that line of the staff upon which the clef is placed; *e. g.* 

. This *C*-clef is generally superseded, in modern usage, by the *G*-clef , in which latter all three of the higher parts are now noted in vocal composition, the tenor being written an octave higher than it actually sounds. But in instrumental scores the *C*-clef is still used for noting certain instruments (viola, trombone); and it is also so frequently met with in older vocal compositions, and sometimes in quite modern ones (BRAHMS!) that a thorough acquaintance with its use, which can be gained only through considerable practice, is indispensable to every earnest student of musical art. All exercises should be written out in score (*i. e.* taking a separate staff for each part) and noting the soprano, alto and tenor in the *C*-clef, as shown above.

It is well to avoid writing the extreme high notes in any of the parts, taking the semitone below the highest as utmost limit. In no composition or exercise should any part begin at either extremity of its range; neither should such very high or low tones be taken by a wide skip, but be led up to gradually.

Diatonic progression is to be preferred to chromatic. The augmented intervals should not be employed for melodic progressions in *a cappella* style.

Progression by steps lends the composition a smoother and more flowing character than progression by skips, which latter is nevertheless quite as allowable as the former. Skips wider than an octave are better avoided. Figures like the following:



particularly in quick time, are unpleasing in effect as well as wearying to the singers; such passages belong to instrumental rather than to vocal music.

PART I.

Simple or Single Counterpoint.

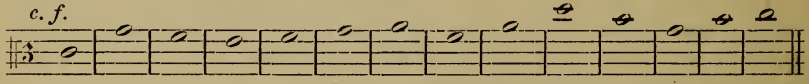
CHAPTER I.

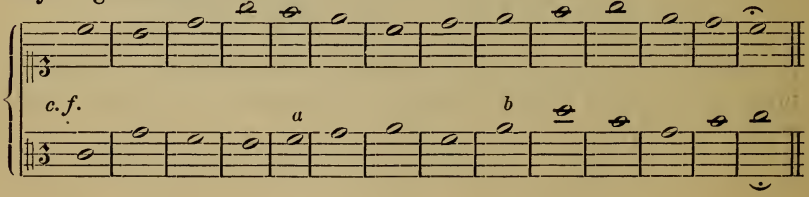
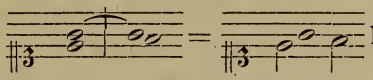
Two-part Counterpoint.

As observed in the Introduction, counterpoint might with reason be termed the science of the progression of intervals. In two-part counterpoint their progressions are presented in the clearest and most elementary form.

The simplest form of two-part counterpoint is that in which the notes of the given part are opposed by notes of equal value in the free part. [See Note II]. This form also furnishes the most complete illustration of the literal meaning of the word "counterpoint" (*contrapunctus*) *i. e.* "note against note" (*punctus contra punctum.*) The first examples are given in whole notes separated from each other by bars, this scheme showing the progressions of the intervals most distinctly and independently, and likewise presenting them, at first, irrespective of rhythmic position. [See Note III].

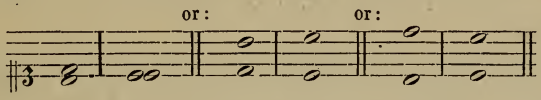
In the study of harmony the general rule was given, that consonances may enter without preparation; whereas dissonances must be prepared. The same rule, with a few exceptions noted below, holds good in the art of counterpoint. For instance, if we take the following given melody or part, also called the *cantus firmus* (Ital. *canto fermo*, *i. e.* "fixed melody"), and marked by the initial letters *c. f.*



and set to the same a free part, using only consonant intervals, the whole may be given thus:

In order to carry out the equal counterpoint logically, the same note is not to occur in two successive measures in either part; for this would produce the same effect harmonically as if two notes were written in one part to one in the other. *E.g.*  harmonically.

When the *c. f.* lies in the lower part, as in the above example, the free part may begin on either the prime, the octave, the third (tenth) or the fifth of the first tone of the *c. f.*, which tone is invariably the key-note, or tonic.

The most satisfactory close is that in which both parts gain the unison (*i. e.* the prime or the octave,) by a step in contrary motion. *E. g.*



Contrary motion is to be preferred to parallel motion, the leading of the parts being brought into much sharper contrast by means of the former. At the beginning of every exercise contrary motion should be employed. Parallel motion may be allowed between two like intervals in succession, and also between three dissimilar intervals. It would not be harmonically incorrect to write long successions of thirds or sixths, but tame and monotonous, and therefore contrary to the spirit of counterpoint, which demands variety and contrasting effect.

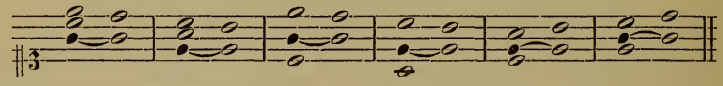
The interval between the parts should in general not exceed a tenth, which permits the student sufficient variety of combination without allowing him too wide a range at the commencement.

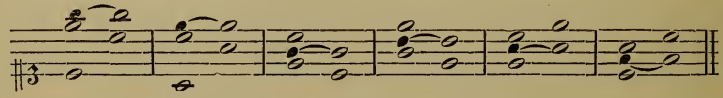
The use of the so-called perfect intervals (the fourth, fifth and octave), in the midst of an exercise, requires special attention.

No perfect interval should be immediately followed by another, for their emptiness renders such a succession disagreeable.

The octave may be occasionally admitted, though its lack of harmonic value renders its frequent employment undesirable. Its best mode of entrance is by a step in contrary motion, as at the close of an exercise, and also in the above example, under *a*.

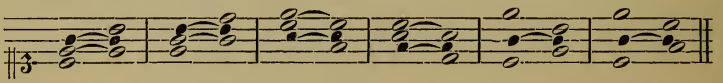
The perfect fifth must be very cautiously employed, and but seldom, on account of its empty character. It may enter, in subjection to the preceding rules, as a progression from any consonant interval except a perfect one. As consonant intervals we have, besides the perfect intervals, the major and minor thirds (tenths) and the major and minor sixths. Our modern system of harmony has for its basis the major and minor triads and their combinations, as exhibited for the major mode by the formula *D/F-a-C-e-G-b-D/F*. The major or minor third, at the foundation of each

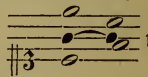
triad having a perfect fifth, is that interval which gives the triad its distinctive major or minor character. This is so firmly rooted in our musical perception that, if we hear the consonance of a major or minor third, we instinctively feel that this third is the foundation of a triad to which the fifth, counting from the lower tone of the third, belongs, in order to complete the triad. The most satisfactory progressions to perfect fifths, from thirds (tenths) and their inversions the sixths, are those in which the lower tone of the entering perfect fifth completes the triad by taking the lacking fifth, the higher tone of the entering fifth supplying, at the same instant, an element of variety and harmonic contrast. The examples given below will make my meaning clear; the fifth which is wanting to complete the triad represented by any third, sixth or tenth, is indicated by a black note.

In the following examples:



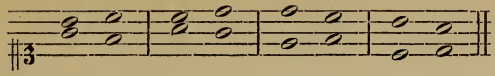
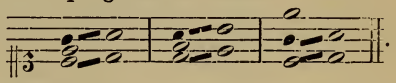
the entering fifths complete the triads both in ascending and descending progression, without, however, affording the positive harmonic contrast of the first examples. Besides, the progression of both parts by a skip in parallel motion is in general to be avoided, as tending to give the harmonic connections a loose and disjointed character.

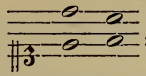
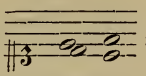
The following forms:

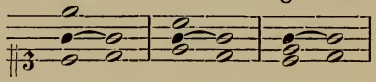


show the entrance of the perfect fifth by a skip from triads (as represented by thirds or tenths) connected with it through the (lacking) third. The last progression is the harshest. An explanation of this phenomenon may perhaps be sought in the fact, that in the tenth, which is wider by an octave than the third, the lower tone asserts itself still more strongly as basis of a triad than in the case of a third; and that consequently the lack of the fifth is more keenly felt. In the progression:  this fifth is not only not supplied, but in its stead a dissonant tone enters, the empty sound of the entering perfect fifth thus appearing doubly unsatisfactory.

The perfect fifth might also enter by a step in both parts in contrary

motion:  (the seventh, although dissonant, is here taken in order to present the entrance of the perfect fifth in all its forms). Both of these progressions should be avoided, as well as the still worse ones:  .

The inversion of  , or  , shows the baldness and harshness of the progression, as an unsatisfactory resolution of the major second, a still sharper dissonance than the minor seventh, in a still plainer light.

The perfect fourth may be briefly disposed of. It is the inversion of the perfect fifth, and its least unpleasant modes of entrance are those in which the progression is the precise inversion of the most agreeable progressions to a perfect fifth. *E. g.*  etc.

Further progressions are simply exaggerations of the defects shown in those with the perfect fifth; the fourth adding to the emptiness of the fifth a harshness peculiar to itself, on account of which it was formerly considered to be, and treated as, a dissonance.

All three perfect intervals should be very sparingly employed, especially in equal two-part counterpoint.

In actual *a cappella* composition the parts are allowed to *cross* each other (which occurs when a lower part ascends, in melodic progression, above a naturally higher one):

1. When this is required for the complete carrying out of any theme or subject in one or both of the parts which cross.

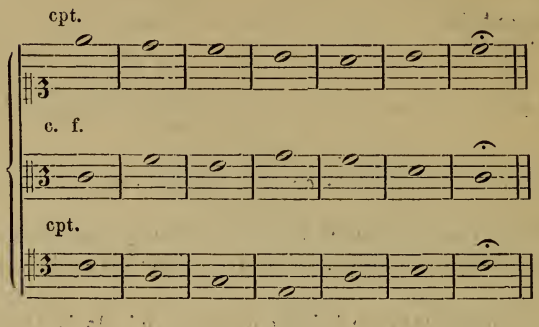
2. For obtaining peculiar effects through the change in the relative positions of voices of different quality, *e. g.* alto above soprano, or bass above tenor.

3. In order to avoid disagreeable harmonic progressions, such as parallel fourths or fifths.

It is better for the student to confine the parts to their usual spheres; none of the cases enumerated above are likely to occur in these exercises at present.

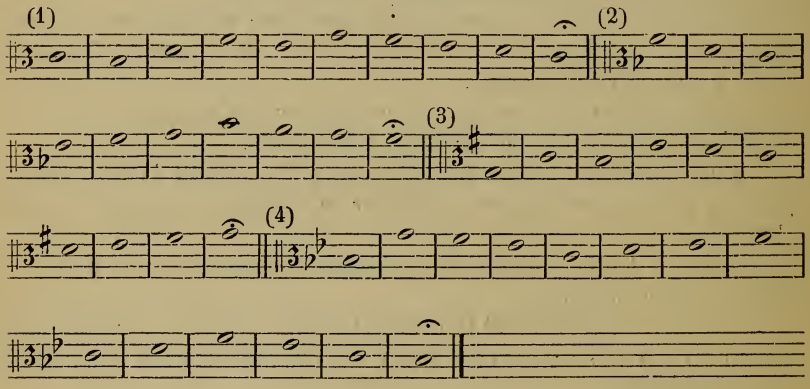
Before taking up the exercises the student should attentively read the simple rules for vocal composition given in the Introduction. Modulation, or the use of accidentals, is for the present to be avoided. In each exercise the *cantus firmus* is at first to be set as lower or second part, and the free part (or counterpoint) written above it, in as many various ways

as possible. The *cantus firmus* should then be set as higher or first part and the free part written below it, also with variations. *E. g.*

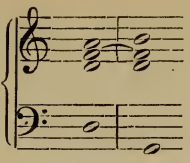


To the above *c. f.* the counterpoint is first written in the soprano-clef. The *c. f. may* then be transposed an octave higher, and furnished with a counterpoint written in the alto-clef. But it takes less time and space to leave the *c. f.* where it is, and to set to it a second part written in the tenor-clef; this practice also helps to render the student expert in writing in all three positions of the *C*-clef. The harmonic effect of course remains in either case the same. It is self-evident that only one counterpoint at a time, either the upper or the lower, is supposed to sound together with the *c. f.*

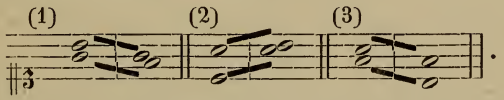
Exercises with Consonant Intervals.



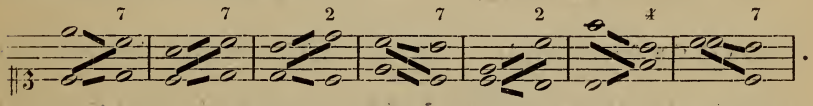
In the foregoing exercises all the intervals, being consonances, were permitted to enter freely, that is, without preparation. As we were taught in the study of harmony, the preparation of a dissonance consists in the presence, in the preceding chord and the same part, of one of the tones

constituting that dissonance, *e. g.*  where the dissonance

G-f is prepared by the *f'* in the first measure. In the "note against note" form of two-part counterpoint this mode of preparation by means of a sustained or held tone is evidently impossible, as the same tone never appears in the same part in two consecutive intervals. A dissonance can now, therefore, according to this rule, be prepared only by the presence, in either of the parts forming the interval preceding that dissonance, of one of the tones forming the dissonance; this tone being taken by the *other* part on progression to the dissonant interval; *e. g.*



Under (1) the note *g'* in the second part is taken in the next measure by the first part, the second part at the same time progressing to *f'*, thus forming the dissonance *f'-g'*; which dissonance was prepared in the first measure by the *g'* in the second part. The other examples need no further explanation. But, it is an axiom in musical theory and practice, that "the octave of any given tone is the repetition of *the same tone* in a higher or lower position". Prime and octave are, as regards their harmonic value in preparing dissonances, convertible terms. It is therefore not only allowable, in preparing a dissonance, to employ the prime in one part as a substitute for the prime held in the preceding interval by the other part; but, instead of this particular tone, *its lower or higher octave may be substituted,* in either part, entering simultaneously with the second tone constituting the dissonance; *e. g.*



These modes of preparing a dissonance I have named; Preparation by Substitution. As will be seen further on, a still wider application of the same principle leads to the resolution of a dissonance by the same means as are used in its preparation by substitution. Preparation and Resolution by Substitution are based upon one and the same principle, which I have named: The principle of Substitution.

Preparation by substitution is merely the theory of preparation carried out to its logical conclusion. The theory of preparation is, in its turn,

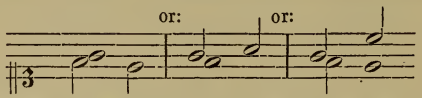
based upon the Interconnection of the Chords, which, in Prof. PAUL'S Manual of Harmony, is shown to be the fundamental principle underlying all harmonic progressions. To resolution by substitution, for the practical application of which principle extended preparatory work in the forms of simple counterpoint is necessary, a separate chapter will be devoted.

For correctly working out the exercises in which dissonant intervals occur, two principal rules must be observed.

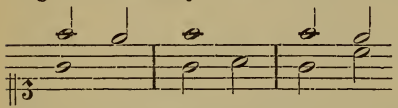
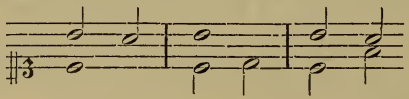
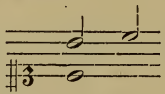
1. No dissonance should enter unprepared.

2. Every dissonance must be immediately resolved; whereby the maxim, that "a progression to a dissonance is no resolution," is not to be forgotten.

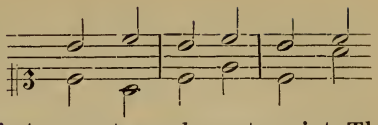
The various modes of preparation have been already explained; we can now turn our attention to the resolutions of the several dissonant intervals.

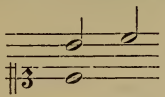
The seconds, both major and minor, may be resolved in either of the following ways: 

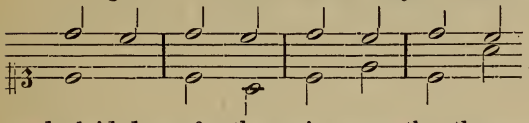
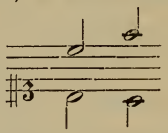
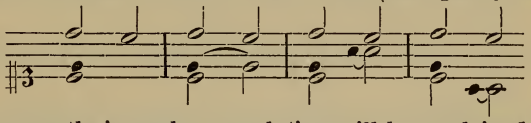
, of which the last only can be employed in two-part equal counterpoint. as both parts are obliged to move simultaneously.

The resolutions of the sevenths, the inversions of the seconds, admit of greater variety. The minor seventh has the following:  , which are, as is evident, simply the converse of those given for the second. The major seventh has, besides these forms:  , also that in which the seventh progresses a step upwards, or, in other words, is resolved to the octave of the fundamental:  . The essential feature in this resolution is not the symphone* of the fundamental and its octave (in the above ex. c'-c'') the resolved seventh, but the progression of the seventh to that octave; the fundamental is free to progress to any consonant

* *Symphone*, a word invented by Mr. J. H. CORNELL of New York, meaning simply "the *sounding together*" of two or more tones, whether as a consonance or dissonance. The word is therefore of wider application than *concord;* it is the exact counterpart of the German *Zusammenklang*.

interval except a perfect one*, *e. g.*  ,

all of which resolutions may be used in two-part equal counterpoint. The resolution  can obviously not be employed at present. The progression of a seventh to a perfect fifth has already been noticed. The resolution of any dissonance whatever, to be thoroughly satisfactory, cannot be to an empty interval.

The regular resolutions of the major ninth are:  , following the rule already laid down for the major seventh; those of the minor ninth are the same, except that in a very slow movement these resolutions may seem somewhat inadequate for such a sharp dissonance, in which case (or any other) the ninth may be resolved like a second:  . For the practical application of the regular resolutions we should remember HAUPTMANN's definition of the chord of the ninth: "A tetrad (chord of the seventh) over an organ-point"; for in every case the resolution of the ninth is based upon the resolution of the seventh in the (here partly lacking) tetrad; *e. g.*  .

The last, and apparently irregular, resolution will be explained in due course.

If the student write out all the various preparations (by substitution) and resolutions of the ninth in two-part equal counterpoint he will find many of them, particularly in slow time, rough and hard in effect, al-

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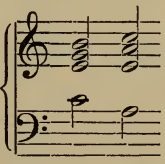
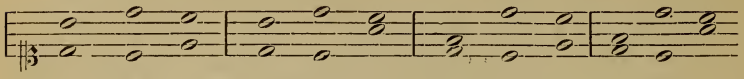
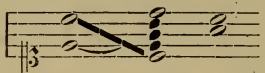
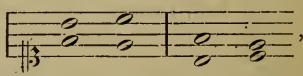
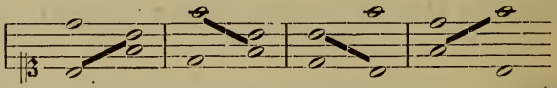
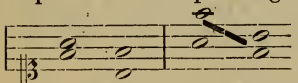
* Viewed in this light, such a progression as: is not to be regarded as a *contracted* resolution, but rather as a complete and natural one.

though not wrong in principle. Those forms are preferable in which both preparation and resolution are accomplished in contrary motion, and in which the greatest melodic and harmonic diversity is attained, as for instance:

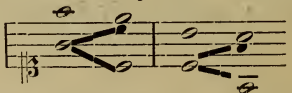
 etc.

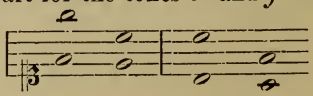
Also, when the ninth enters from two tones belonging to the full chord of the ninth, *e. g.*  , its effect is more like that of that full chord, and its resolution in accordance with the rules for resolving that chord is more satisfactory. In unequal counterpoint any of the forms of resolution or preparation may be used, of course with due regard for harmonic variety.

In the major mode the remaining dissonant intervals are: the augmented fourth and its inversion, the diminished fifth:  , here given together with their regular resolutions. In two-part equal counterpoint they must enter, if prepared, by a skip in both parts, best in contrary motion: 

As previously remarked, skips in both parts in parallel motion are apt to produce an unpleasing effect, although occasionally allowable:  etc. Both intervals are often taken without preparation, even in *a cappella* style; but such liberties are for the present to be avoided.

By the foregoing examples the regular resolutions of the various dissonant intervals in major have been presented. Some bold, but harmonious, leadings, found not only in classic compositions but also in books of instruction in counterpoint (CHERUBINI) remain to be noticed.

The fundamental of the seventh is occasionally led a fifth downwards instead of a fourth upwards, *e. g.*  . This is one of the simplest forms of *resolution by substitution*, the tones c' and f being substituted in the second part for the tones c'' and f' respectively.

Similar leadings of the first part:  in which

the higher tone of the dissonant interval is treated as the fundamental, and the lower tone regarded as a seventh, are based upon the same principle; though such a resolution of a *minor* ninth would be decidedly hazardous in two-part counterpoint. Both forms are to be used only in extreme cases, where either part would otherwise be obliged to progress, upward or downward, beyond its natural range.

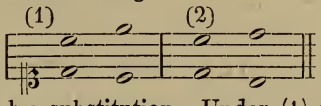
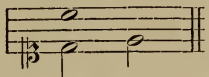
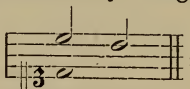
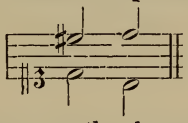
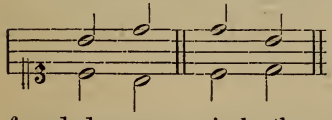
The two following examples: 

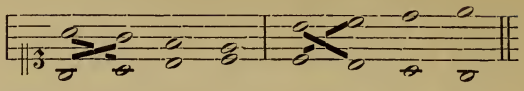
exhibit not unusual forms of resolution by substitution. Under (1) the regular resolution would be thus:  forming the sixth e'—c''.

But in ex. 1 the resolution takes the form of the tenth c'—e'', which is simply the inversion of the sixth e'—c''; for the e', which is the *lower* tone of the latter interval, is substituted an e'' as *higher* tone of the tenth; and for the c'' found in the sixth as *higher* tone, is substituted a c' as *lower* tone in the tenth. The *same tones* appear in the resolution by substitution as in the regular resolution, their relative positions only being altered. — In ex. 2 the *regular* resolution would be:  , constituting a sixth d'—b'; whereas we find in this example a tenth b—d'', or the inversion of the sixth d'—b'. The lower tone, instead of being held, progresses downward to b; and the higher part, instead of progressing to b', takes d'', the octave of the d' previously found in the lower. This resolution of the minor seventh is totally different in principle from the similar resolution of the major seventh:  The minor seventh can never be treated like a passing seventh, the natural resolution of which latter is to the octave of its fundamental, leaving the fundamental free to progress to any consonant interval. This resolution of the minor seventh is a resolution by substitution, in which the two tones must form the interval of a tenth in order to make the resolution complete.

The following resolutions of a major seventh and a ninth by substitution:

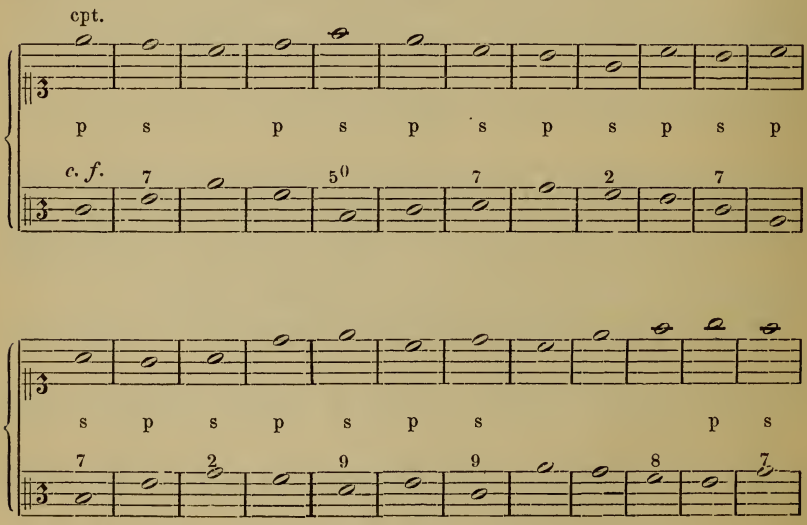
 require no detailed explanation, being founded upon precisely the same principle as the two resolutions of the minor seventh given above.

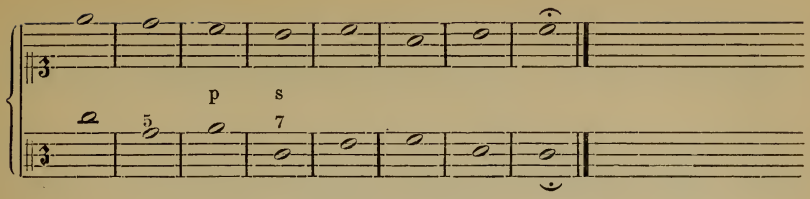
Another form of substitution must be noticed here:



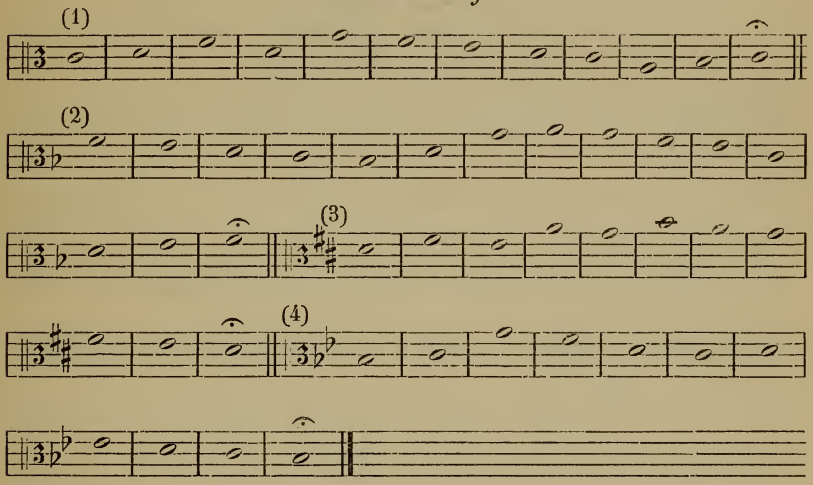
which is the least logical and satisfactory of all, and should be avoided in writing the exercises. Its faultiness consists in the insufficient resolution of the first dissonance, which progresses directly to another dissonance instead of to either of its natural resolutions. This form is nevertheless often employed by the best composers, even in *a cappella* style; though usually only in cases of emergency, where a free melodic leading of the parts appears more desirable than a too anxious observance of strict harmonic rules.

It must also be remarked, that the nature of the two-part movement imposes certain limitations, in regard to wide skips and empty intervals, on the melodic progression of the parts, which limitations are relaxed in strictness when a bass is present, as in three- or four-part compositions, to give steadiness and fullness to the harmonic combinations. A wild skipping about of either part, even where each interval taken is harmonically prepared, is to be condemned. Where the parts progress in parallel motion, a skip in the one should generally be counterbalanced by a step in the other. And in two-part equal counterpoint wide skips in both parts, even in contrary motion, should seldom occur. In the following model example each instance of preparation by substitution is marked by the initial letters *p. s.* Resolutions by substitution are left till later.





Exercises in Major.

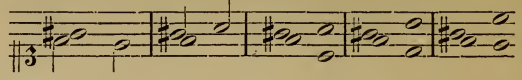


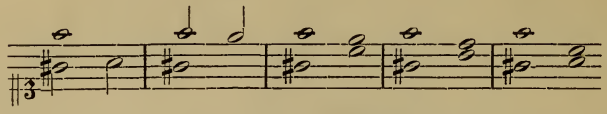
If these exercises should not afford sufficient practice, those previously given for consonant intervals may be taken in addition. Through practice the effects produced by the sudden entrance of the milder and sharper dissonances will be learned. The latter are employed, in actual composition only when the effect produced corresponds to the emotions to be expressed. And it must be remembered, that the preparation and resolution of dissonances between two parts *as sung* has a totally different effect when hammered out on the piano. This is especially true of slow movements, the contrast between the mellow, sustained tones of the voice and the metallic, vanishing sound of the piano being then most apparent.

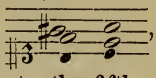
The minor mode has four dissonant intervals peculiar to itself, namely: the augmented fifth and its inversion, the diminished fourth; and the augmented second, together with its inversion, the diminished seventh.

The two latter are allowed, even by the strict theoreticians of the HAUPTMANN school, to enter without preparation. This exemption from the general rule is perhaps due to the fact that these intervals, although dissonant, differ but slightly from the minor third and major sixth respect-

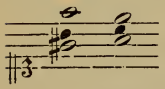
ively; in tempered harmony (on the piano) they coincide with these latter.

Their resolutions are:  ,

and:  . That of

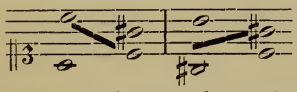
the augmented second to the fourth:  , and its converse, the

resolution of the diminished seventh to the fifth:

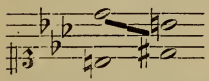
 are unsatisfactory simply on account of the emptiness

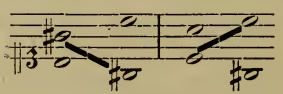
of these perfect intervals: the addition of a third renders both resolutions agreeable.

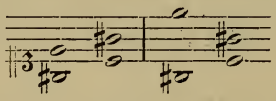
The augmented fifth and diminished fourth, being strongly dissonant, must be prepared. The two following forms of preparation:

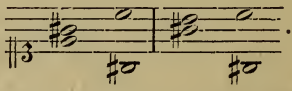
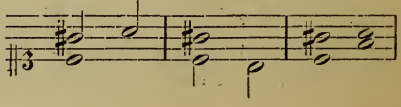
 although alike in principle, are different in

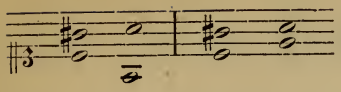
practice, inasmuch as the second produces a harsh and inharmonious effect similar to that noticed in a case of cross-relation, *e. g.*

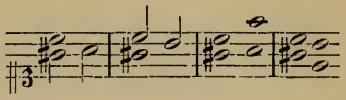
 ; the first, on the other hand, being harmonious and

pleasing. A satisfactory explanation of this phenomenon is not easy to find. The converse preparations of the diminished fourth are both excessively disagreeable in effect:  . If the augmented fifth enter from a sixth or thirteenth the inharmonious effect is

avoided:  ; the diminished fourth can enter

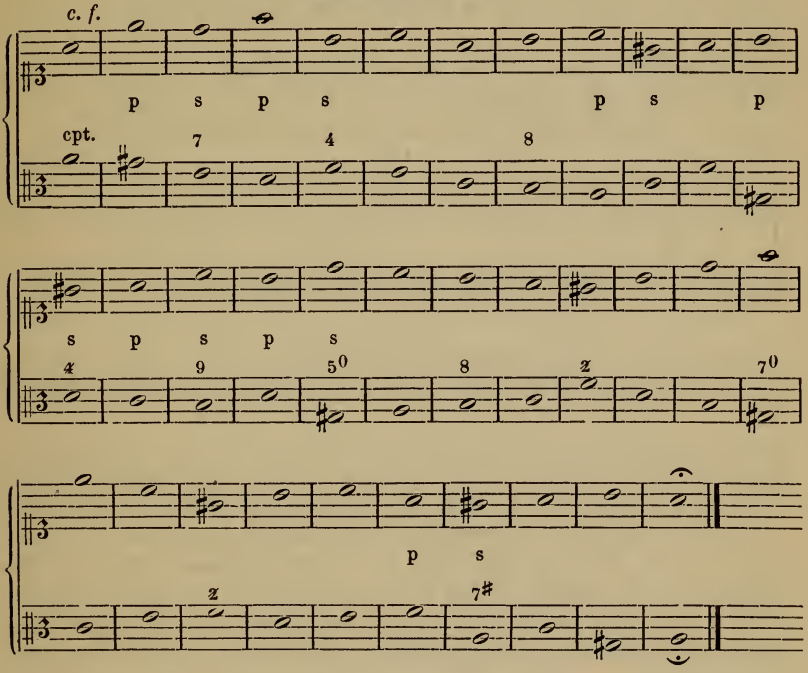
in either of the following forms:  . The resolutions of the augmented fifth are: 

 , the last not being quite satisfactory;

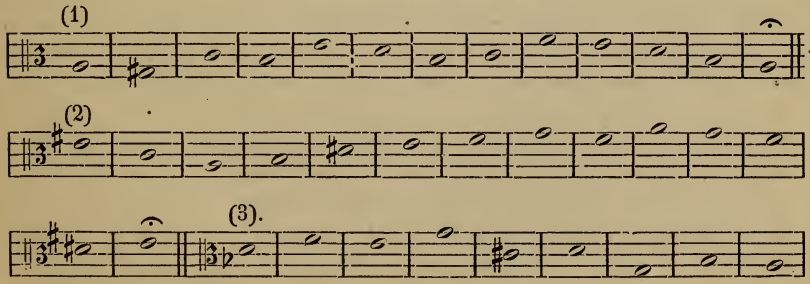
the resolutions of the diminished fourth: 

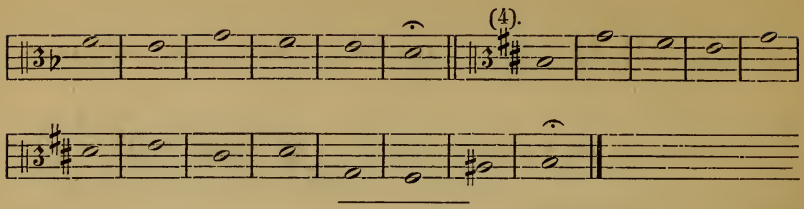
require no special notice.

Example in Minor.



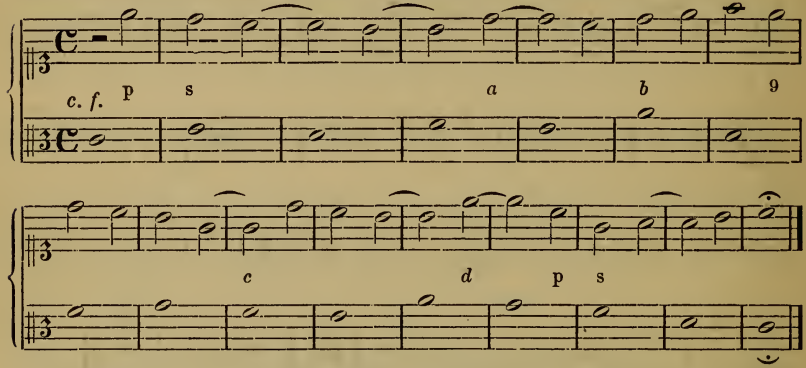
Exercises in Minor.





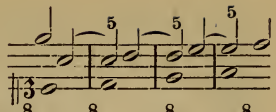
On taking up the subject of unequal counterpoint, in which each note of the *cantus firmus* is opposed by two or more in the free part, a new and important element has to be dealt with, namely: *rhythmical accentuation.*

The simplest form of unequal counterpoint, two notes against one, shows us the most elementary form of the *measure*, consisting of one thesis, or accented division, and one arsis, or unaccented division.

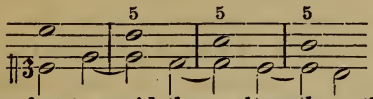


For the entrance of dissonances in rhythmical compositions the rule is often given, that they should fall on the arsis, it being considered preferable to let the measure begin with a consonance. A strict observance of this rule would, however, give any composition or exercise a comparatively tame and monotonous character; consequently even strict contrapuntists permit so many deviations from it as to make it appear of doubtful utility. In point of fact, its observance is a mere matter of taste and fitness. No well-grounded reason, either scientific or practical, can be advanced in support of such a theory. The perfect fourth and fifth must be prepared like dissonances when entering on the thesis, these empty intervals otherwise producing an unpleasant effect, as shown under *b*. This fourth *a'—d''* is followed by a fifth, a progression which is better avoided, a succession of two perfect intervals being disagreeable. Successions of fifths or octaves, on either thesis or arsis of successive measures, should in general not occur in two-part counterpoint, as no full harmonies intervene to soften their harshness. They are most tolerable when a

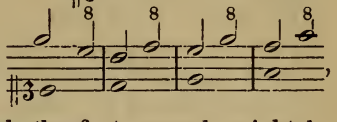
sixth occurs between the perfect intervals, as:



or:



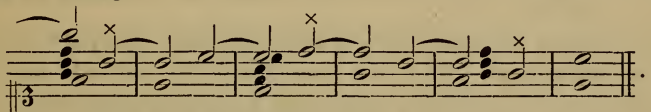
or:



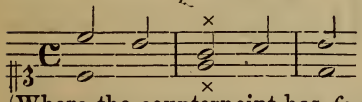
it is safest to avoid them altogether, though the first example might be considered an exception to the general rule.

Instances of preparation and resolution by substitution are marked *p s* and *r s* respectively.

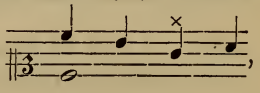
Under *a* and *c* are found examples of *indirect resolutions* caused by the interpolation of passing notes. Such passing notes are generally tones forming part of the same chord to which the tones constituting the dissonance belong:



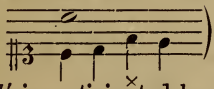
Where the passing note itself also forms a dissonance, this second dissonance must be resolved to the same tone to which the original dissonance would have progressed if directly resolved, as shown in the above examples. Passing notes may be used whenever necessary for securing an agreeable and flowing movement of the counterpoint. They enter best on the arsis, the resolution of the dissonance following immediately on the next thesis, as under *c*; though the resolution may sometimes be retarded, as under *a*, by a tie, in which case it is finished on the arsis of the second measure, *but not later*. Passing notes may enter on the thesis:



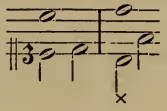
etc., but the effect is apt to be hard. (Where the counterpoint has *four* notes against one in the *c. f.*, a passing note may enter freely on the *second* thesis, *e. g.*



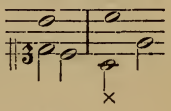
or:



). Unter *d* the resolution of the major second *a'*—*b'* is anticipated by the counterpoint, which takes the *e''* before the *c. f.* progresses to *g'*; this *e''* is therefore no passing note, but simply an anticipation. Cases like the following:

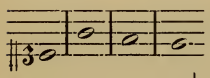


or:

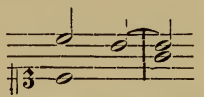


are *not* instances of passing notes; the former is a full resolution by substitution as before explained, and the latter a natural resolution of a major seventh.

The use of the ligature (tie) in preparing or resolving dissonances has already been pointed out in the study of harmony. For these purposes it may now be employed *ad libitum*. Through retarding the progression of one of the tones forming a dissonance peculiar harmonic combinations often result, which might be called "retarded resolutions." These are loose forms of indirect resolutions, caused by a multiplication of passing notes. For example, if we take this *c. f.*

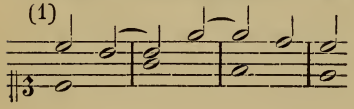


to which a counterpoint in half-notes is to be set, and begin so:

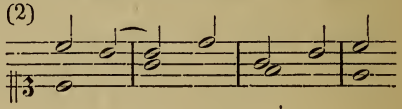


there is formed, on the arsis of the first measure, a major seventh, which is not immediately resolved on the thesis of the second measure. Now, the resolution of this seventh may be accomplished, under the existing conditions, by a progression either to c'' or to a'; and this progression may be a direct or an indirect one; *e. g.* (to c'')

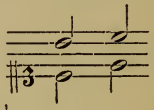
(1)



or: (2)

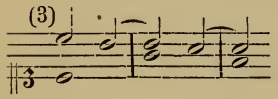


which are retarded forms of the direct resolution:

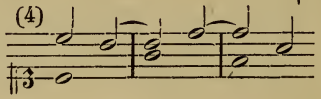


; (to a')

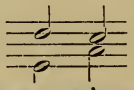
(3)



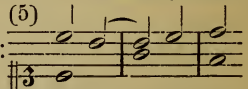
or: (4)



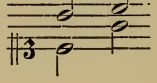
, the two latter being retarded resolutions of:



. In these four examples the g' in the *c. f.* may be regarded as a passing note, either followed as in ex. 3 by an immediate resolution, or as in 1 and 2 by still other passing notes in both the counterpoint and *c. f.* In the following: (5)

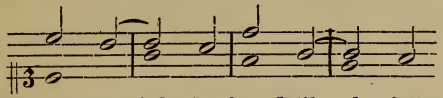


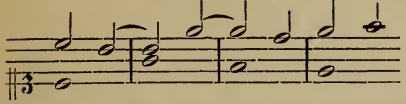
the seventh is resolved directly to c'' in the second measure, constituting a fourth with g', which is here no passing note, but an anticipation of the the direct resolution



. This direct resolution has an empty

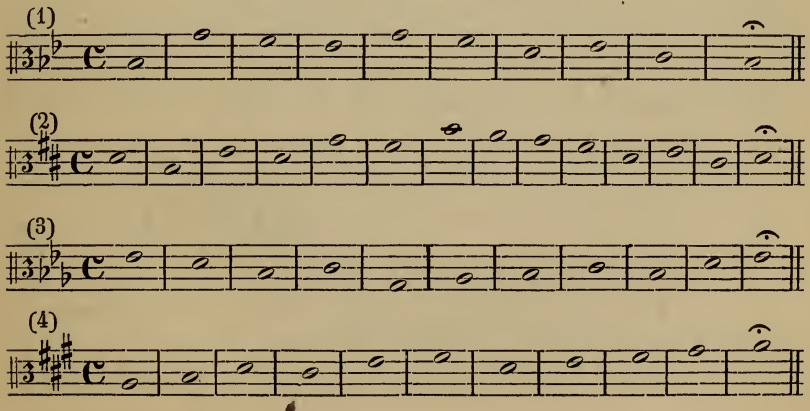
sound, which in the indirect resolution (5) is partially effaced ("covered up", so to speak) by the harmonies preceding and following it.

Still looser methods of resolution, in which the tones forming the consonant interval to which the dissonance is resolved do not sound together, as:  are hardly to be taken as models. Cases might be found like the following:

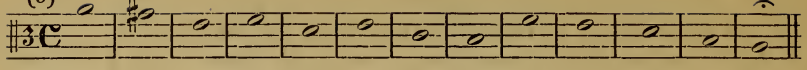
 where the dissonance is left *unresolved*; this could perhaps be explained under the theory of anticipation, to the effect that the b' belongs harmonically to the g' following in the second measure, and, as entering in the first measure merely by anticipation, requires no resolution as the seventh of g'. Such elastic interpretations might aid in defending many a case of bad counterpoint; for our present purpose full resolutions are much more useful and satisfactory in every way. Even when taking great liberties the fundamental laws of harmonic progression must be respected.

If the movement of an exercise be begun in half or quarter-notes, it must be carried out in the same to the close. As shown in the example, the counterpoint need not begin with the *c. f.* on the thesis of the first measure, but may enter on the arsis. This mode of entrance may be employed at pleasure, and is often helpful in beginning fresh variations of the counterpoint, besides being in itself agreeable. In working out the exercises in minor the harmonic minor scale is to be employed for the present.

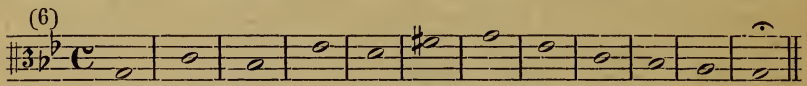
Exercises in Major and Minor.



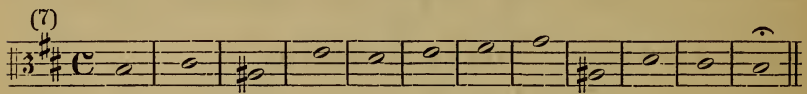
(5)



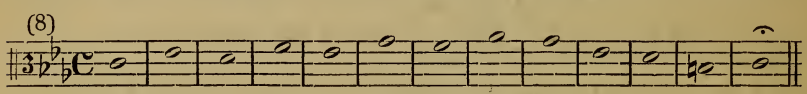
(6)



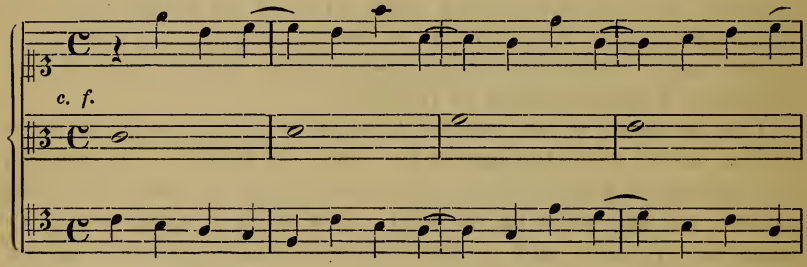
(7)

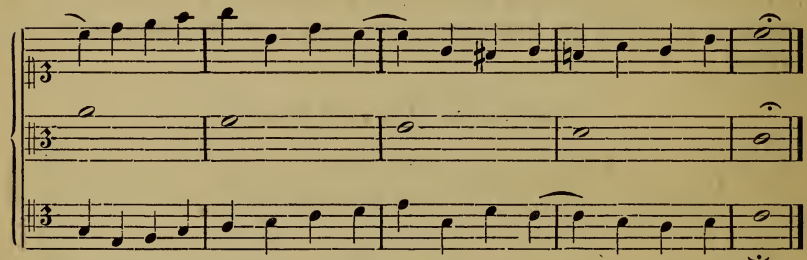


(8)

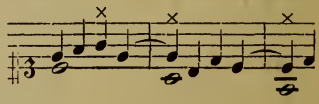


We now proceed to that branch of unequal counterpoint in which four notes are set in the counterpoint against one in the *c. f.*

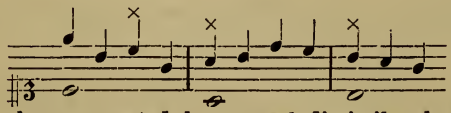




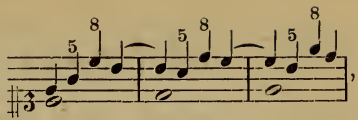
One of the commonest mistakes made is a succession of fifths or octaves on the accented parts of the measure, *e. g.*



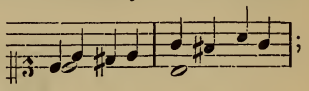
or:

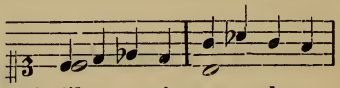


. They are of less consequence when separated by several dissimilar harmonies, or when falling on

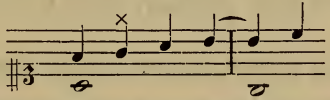
unaccented divisions of the measure, as:  ,

but must even then be employed sparingly.

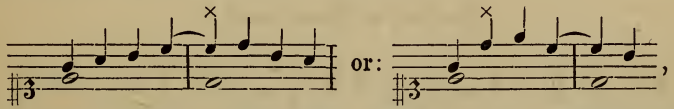
Changing notes formed by accidentals may occasionally be introduced for the sake of variety, if sharps are used:  ;

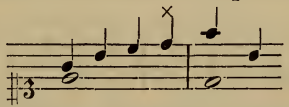
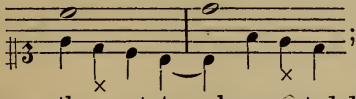
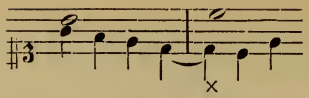
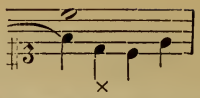
by employing flats in major the character of the key is apt to become indistinct through apparent modulation to nearly related minor keys, and their use is therefore better avoided:  .

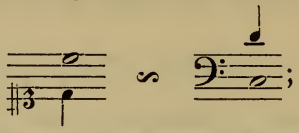
The minor seventh is sometimes led upwards like a major seventh:

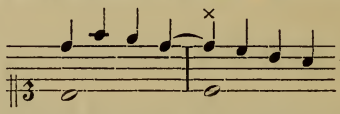


This is no true resolution of the minor seventh, but a free leading of the counterpoint, which can be accounted for only through the fact that each of the comparatively slow, sustained tones of the *c. f.* acts to a certain extent as an organ-point, thus permitting greater freedom of movement to the more lively counterpoint. But this liberty should be taken only when the counterpoint is led up to the minor seventh by a step and without a pause, as shown above. In other cases, such as:

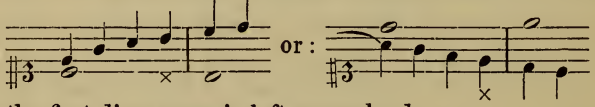


(that is, from a pause or from a skip), when the minor seventh is led upwards to the octave, this octave should be treated as a passing note, the true resolution following immediately. The attentive student will perceive the difference in principle between the above examples and the following resolution by substitution:  . Just the same rules hold good where the fundamental progresses downwards by a step, *e. g.* ; but when it enters from a tie, or by a skip, on the most strongly accented division of the measure, the character of the interval as minor seventh is so marked that a full resolution is

required:  or:  . It must however be observed, that in cases like the two last the rule is often disregarded, the fundamental being treated like an *inverted ninth*:



the *c″* appearing perhaps more as fundamental than as seventh, and progressions like the following:  being allowable. It is nevertheless best, especially when the counterpoint skips, to give a full resolution.

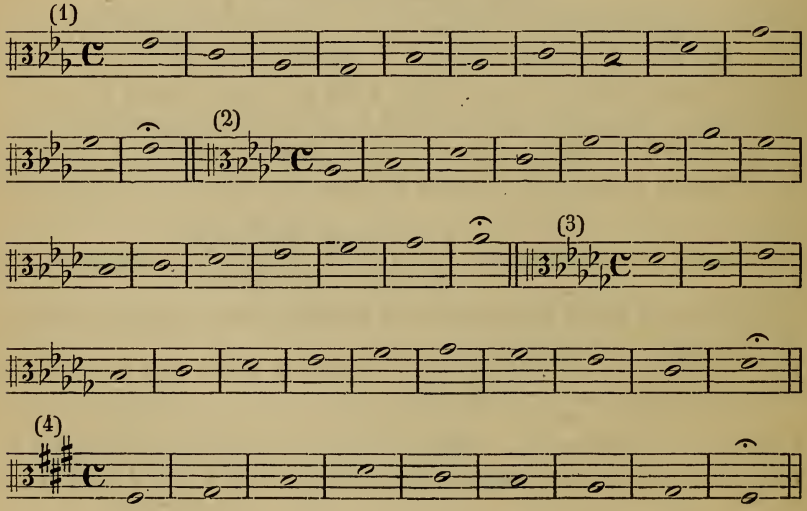
The student is again warned against writing progressions like these:

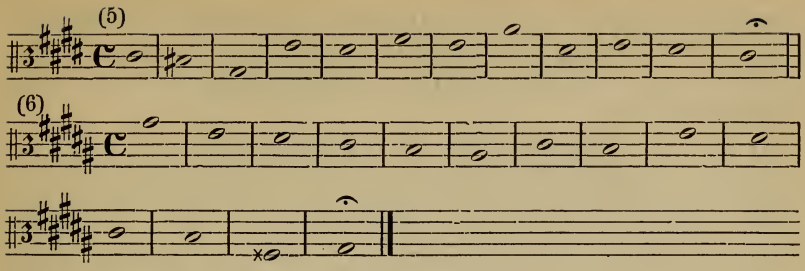


in which the first dissonance is left unresolved.

Passing notes may enter freely on the *second* thesis of a measure, as already pointed out. For *melodic phrasing* of the counterpoint, compare page 38.

Exercises in Quarter-notes.





CHAPTER II.

Three-part Counterpoint.

The fundamental difference between the examples now to be taken up and those preceding them is, that instead of being restricted to simple intervals we shall now be enabled, through the addition of a third part, to employ all three tones of the triad, and hence to present *chords* in a more tangible shape than heretofore.

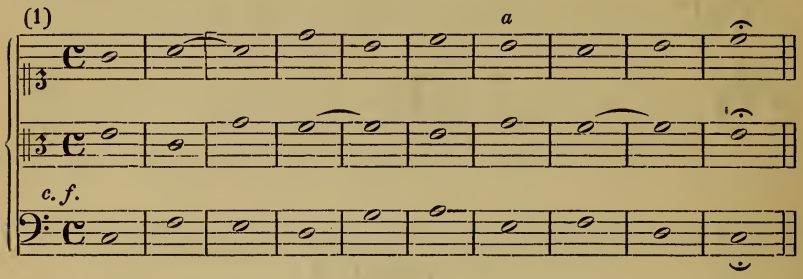
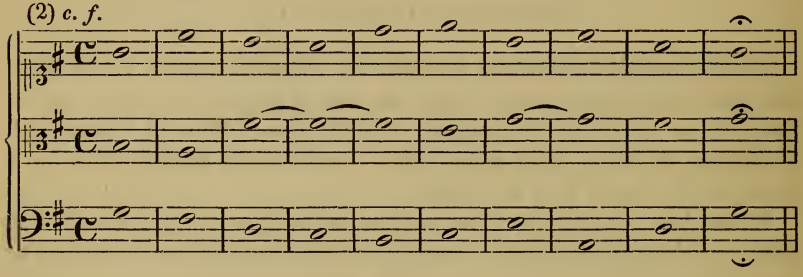
When the *c. f.* is set in either of the highest parts, special attention must be paid to the leading of the bass, which should always be melodious (not too monotonous) and flowing. The basses given for the exercises in harmony may be taken as models. No *c. f.* is to be regarded as a specimen bass, the tone before the last always being a second above or below the key-note, which precludes the formation of the usual styles of close as yet learned. The *c. f.* is given in this form for two reasons: first, in order to afford practice in harmonizing any bass; second, because melodies ending in this manner are also adapted to be set in the higher parts; while the peculiar leading of the bass in the regular closes is very clumsy when transposed into other parts.

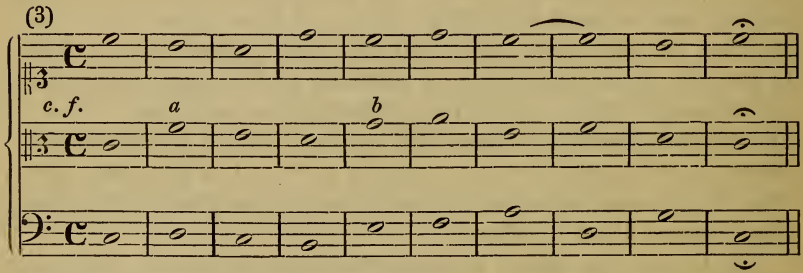
After the bass, the leading of the soprano is most important; this should present as much variety as is consistent with a smooth and harmonious movement.

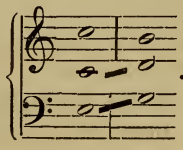
The alto is often used as an harmonic filling, less care being taken to secure variety of progression in this part when the *c. f.* is in the bass or soprano.

In the exercises with whole notes the same tone may be occasionally repeated in successive measures (in any part but the bass); the tie is then employed principally to exhibit these tones as the connecting links between the chords in which they occur; the tones may be conceived as

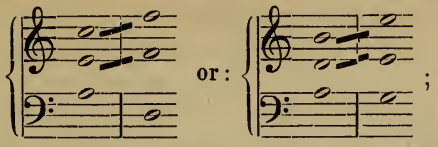
repeatedly accented, or as held, at pleasure. An attempt to write different notes in each measure will speedily show that forced and unnatural progressions result from disregarding the simplest and most obvious modes of interconnection.

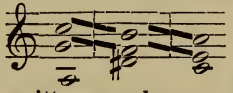
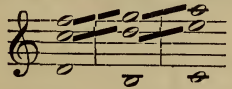
(1)

(2) *c. f.*

(3)

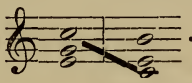


Attention must be called to several points. So-called "covered" fifths may be employed without hesitation in the positions shown to be correct in the last chapter, if the two parts forming the covered fifth progress in contrary motion to the other part, and a full triad results; as under *a*, ex. 1., or:  . Covered octaves are innocuous when formed

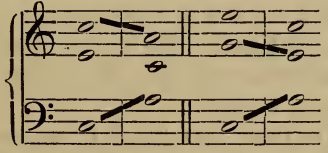
by upward progression between the first and second parts:



i. e. when they appear either as a doubled fundamental in a chord of the sixth, or as a doubled third of a chord in the fundamental position. When occurring between the outer (*i. e.* highest and lowest) parts in upward progression they are less reprehensible than between the two lower parts, which latter progression should be avoided. They should never be written in downward progression between any two parts: except at the close, where no special pains need be taken to avoid them. Parallel ("open") fourths may be written when accompanied by the third below the lower tone of the fourth (ex. 3, *a* and *b*). Such a progression, however, involves parallel motion between all three parts, and should therefore be seldom resorted to. The effect is also not bad when the bass forms a third with the lower tone of the second fourth only:  when even three parallel fourths may be correctly written, as above; or (with resolution by substitution):  . Parallel motion in all the parts may also occur at the close; or in a case of preparation by substitution like this:



These and like progressions must be rarely used; they are to be regarded as exceptions to the general rule: that contrary motion should be employed, which rule is the corner-stone of contrapuntal form. "Open" octaves and fifths are not likely to occur in the three-part movement in *parallel* motion; but must be guarded against in *contrary* motion:

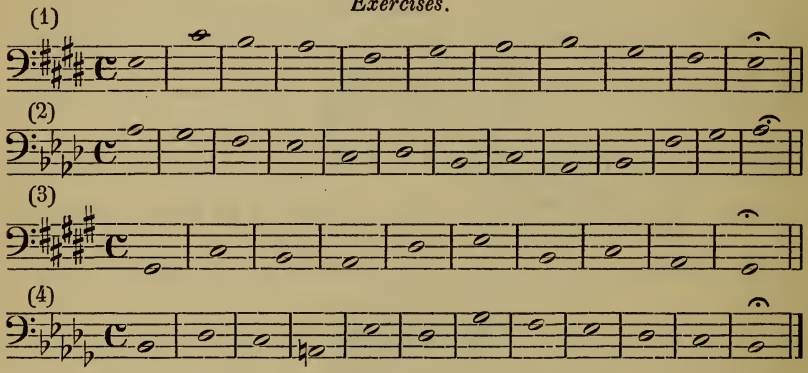


For doubling the intervals the general rule may be given, that neither of the tones constituting a dissonance should be doubled. Of the consonances the major third, as doubled in the octave by the two lower parts, has perhaps the harshest effect, and should not be taken without preparation. Other consonant intervals may be doubled almost at pleasure; no further

rules can be given, and the attentive student will soon discover what combinations are most or least desirable.

For working out the exercises with whole notes the *c. f.* is first to be set in the bass, and the counterpoint in soprano and alto written with as many variations as possible; the *c. f.* is then to be set in the soprano, and finally in the alto, always with as many variations as possible of the counterpoint. If the leading of the *c. f.* be such that the usual compass of any part in which it is set is overstepped in either direction, the *c. f.* may be transposed to another key (ex. 2.). Here it might have been set an octave lower in the original key; but the alto would then have had much less freedom of progression, being confined to the lower half of its range. The parts may begin and end in unison (octaves) or with the tonic triad in any variation of the fundamental position. The unison (octaves) in all parts together in the midst of an exercise is forbidden.

Exercises.



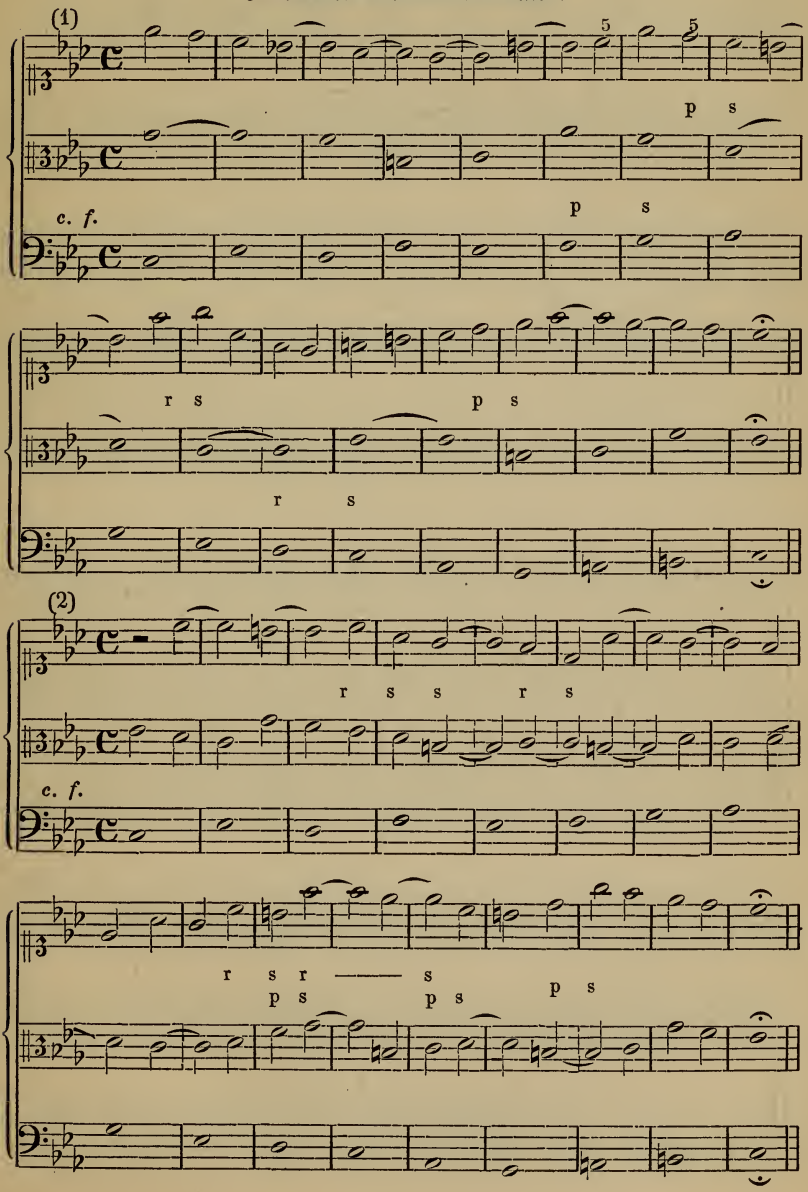
For working out the exercises in half-notes the following order is to be observed: the bass first takes the *c. f.*, as in ex. 1 and 2 below, with the soprano in half and the alto in whole notes; then both in half-notes. In the next two exercises the soprano has the *c. f.*, to which the bass is written in half-notes and the alto in whole notes, then both the latter in half-notes [ex. 3 and 4]. Finally, the *c. f.* is given to the alto, and the soprano written in half-notes with the alto in whole notes; then both together in half-notes [ex. 5 and 6].

The primary object of these exercises is to teach the student gradually to introduce as much variety and independence in harmonic and melodic progression as is consistent with a good melodic leading of each individual part. The advice given in the Introduction, that he should hear every note in every exercise he writes, without resorting to external aids, cannot be too often repeated. No exercise should be carried half-finished

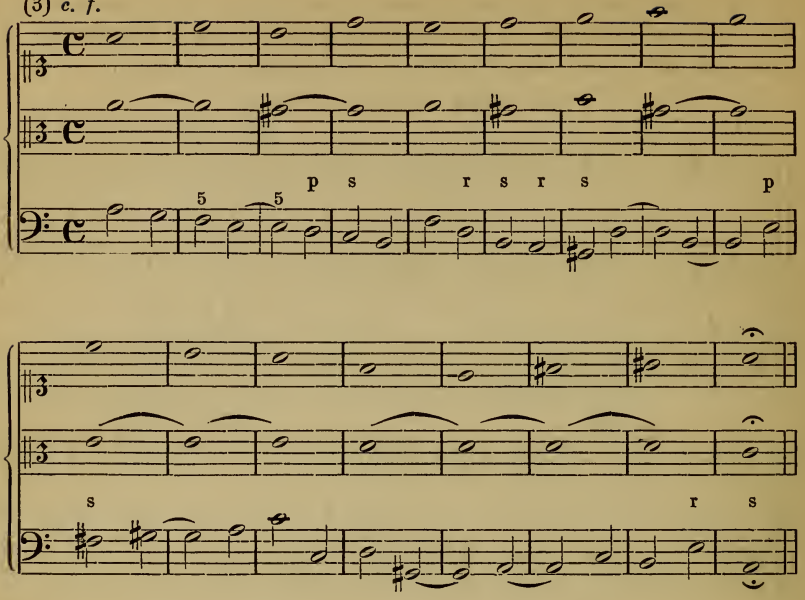
155505

to the piano "just to see how it sounds," but ought to be worked out to the close, and carefully read over, before being played. Progress may at first seem slow, but is at least sure, if this method be adopted.

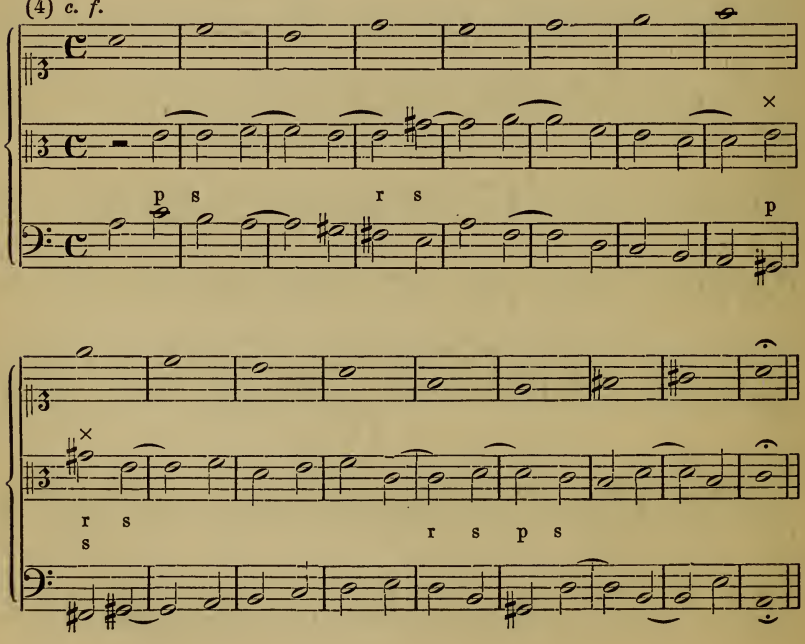
Six Model Exercises in Minor.

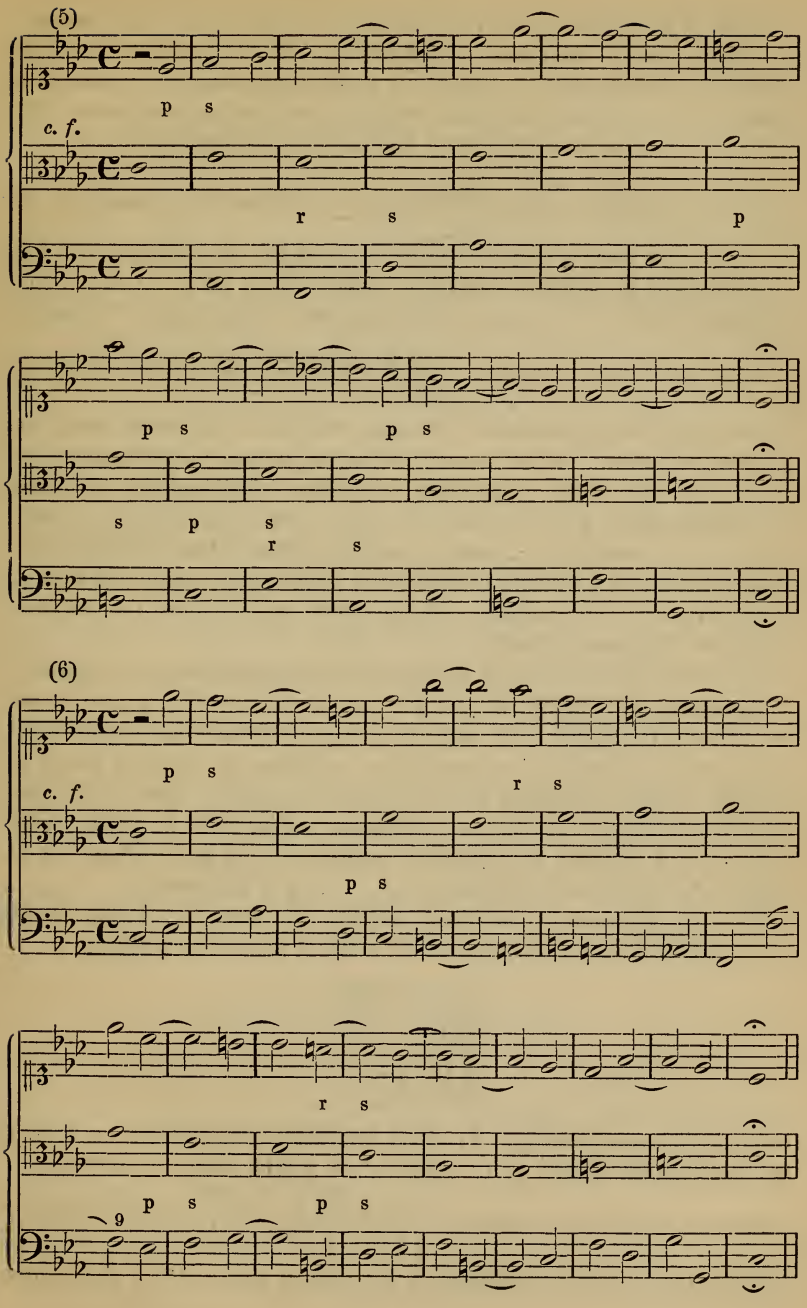


(3) *c. f.*

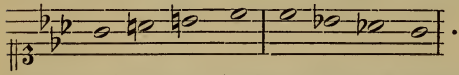


(4) *c. f.*

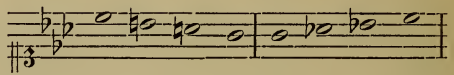



(5)
p s
c. f.
r s
p
p s
p s
s p s
r s
(6)
p s
c. f.
r s
p s
r s
p s
p s
9

These six examples are given in minor in order to show how variously the *melodic* minor scale may be employed. In this scale not only the seventh ("leading note") is raised by a chromatic semitone in ascending progression, but also the sixth; while in descending progression both sixth and seventh retain the pitch indicated by the signature; *e. g.*



. This mode of employing the melodic minor scale is the most simple and natural, and presents the fewest difficulties as regards modulation. The close of the *c. f.*, and various passages in ex. 1, 2, 3 and 5, exhibit the scale thus treated. Its employment in the reverse direction:

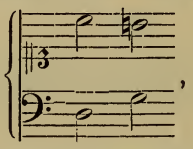


is decidedly more hazardous. Of these two forms the latter should not be tried at present, as the lack of the leading-note in upward progression often gives the effect of a strong modulation, thus tending to weaken the mental hold on the original key. The former, found in ex. 4 and 6 must be used cautiously. I would recommend that, when working out the examples for the first time, the harmonic minor scale should be employed in preference to the melodic, which latter can be taken for variations whenever it appears suitable.

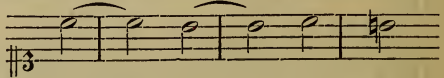
A careful analysis of each instance of the preparation or resolution of a dissonance by substitution will aid the student more than pages of commentaries. He ought to be able to give an explanation of each individual case of preparation or resolution, including the simpler forms not marked, before attempting to work out the exercises. Some of the more doubtful situations can now be explained, taking them in regular order.

(Ex. 1.) The fifths on the arsis, marked 5, have no ill effect, as the chord of the sixth and seventh $g - f' - e'' \flat$ is interposed.

(2). On the arsis of the third measure we have the minor seventh $d - c''$ between bass and soprano. The direct resolution would be:



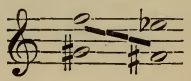
forming the major tenth $g - b'$. This resolution is impossible on account of the leading of the *c. f.*; besides, it would bring a tiresome repetition of the soprano-phrase:

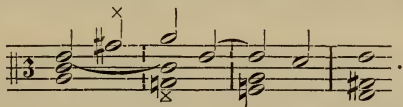


Instead, the soprano is led through the passing note $a' \flat$ to g', here form-

ing with the *b* in the *alto* a minor sixth *b*—*g'*, or the precise inversion of the direct resolution. This is an instance of resolution by double substitution, and is marked accordingly *r s s*. The progression is bold, but the resolution is complete. — In the last measure the augmented triad enters without harmonic preparation; such a liberty could be taken only at the close, where it seems hardly necessary to interrupt the free movement of the soprano, which is in itself a *melodic* preparation of the dissonant *e''*♭; this latter might of course be prepared as in ex. 1. The reason for a certain laxity, at the close, in the rule for preparing dissonances, is to be sought in the desirability of heightening the effect at the end of a composition. A flat and conventional close may often spoil the whole effect of really fine harmonic and melodic combinations preceding it. But no relaxation of the rules should be carried so far as to leave any dissonance unresolved, this having an effect just the opposite of the one intended.

(3) The fifths on the thesis in the second and third measures, between bass and soprano, are rendered harmless through the interpolation of a chord of the fourth and sixth.

(4) Case of cross-relation between soprano and bass, marked ⋈. Its effect is softened by the harmonic attraction of the ninth *f''* to *e''*♭ (octave of *e'*♭ in alto) to which it is resolved on the thesis of the next measure; and also by the entrance of the dissonance *F*♯—*g*♯ between bass and alto, prepared by the *G*♯ in the bass. Taken by itself:  the progression would appear harsh and inharmonic in the extreme. In free composition the progression, as shown in the exercise, would be justifiable, but is possibly too bold for a stricter style, and is left simply to be thoroughly examined and considered, as it might easily have been changed. Another case of cross-relation sometimes met with in *a cappella* composition, to which exception can hardly be taken, is the following:



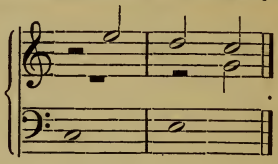
The *g'*♯ is attracted harmonically to *a'*, and the dissonance *g*♮—*a'* is harmonically prepared by the *a* in the first measure. This dissonance is resolved by substitution (*d'* instead of *d''*) on the arsis of the third measure.

(5) The bass takes rather wide skips, which are allowable in slow time, although in general better avoided.

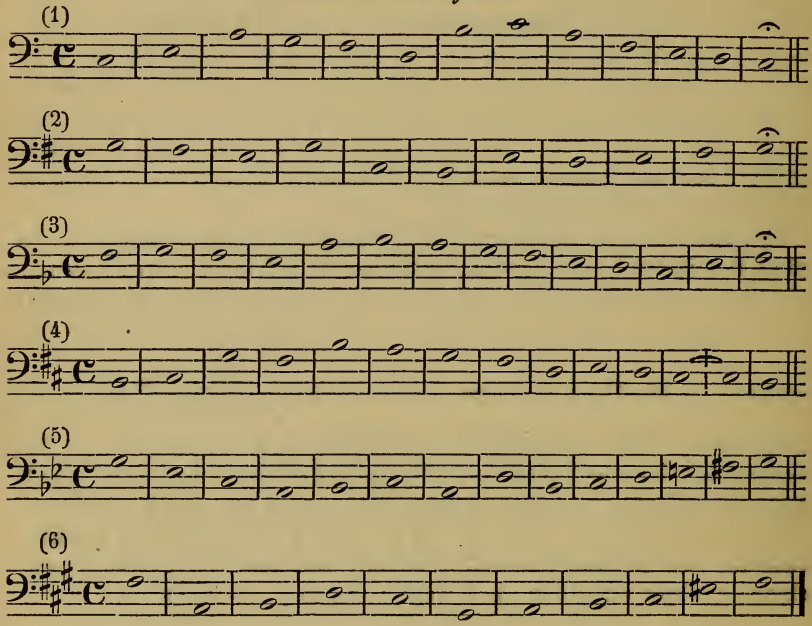
(6) In the progression marked 9 the bass-tone *f*, which forms a minor seventh with the soprano *e''*♭, is not treated as fundamental but as an *inverted ninth*, and consequently led down to *e*♭; the *e''*♭ is treated as funda-

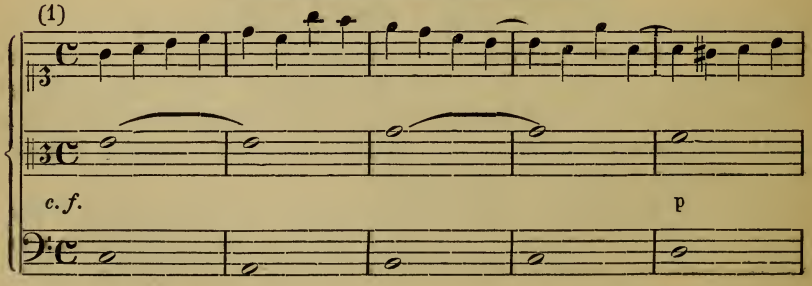
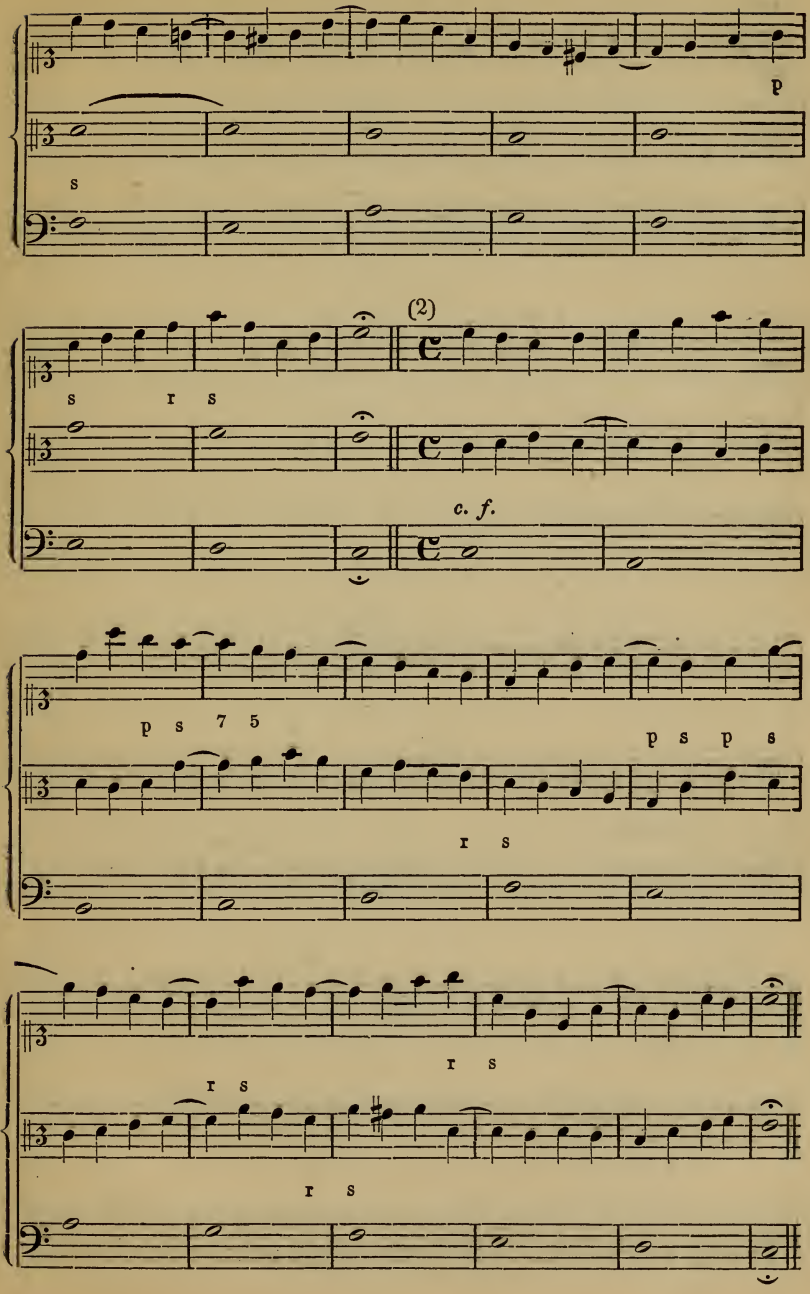
mental, and skips to the consonant tone c''; this resolution is not absolutely incorrect, but a trifle hard.

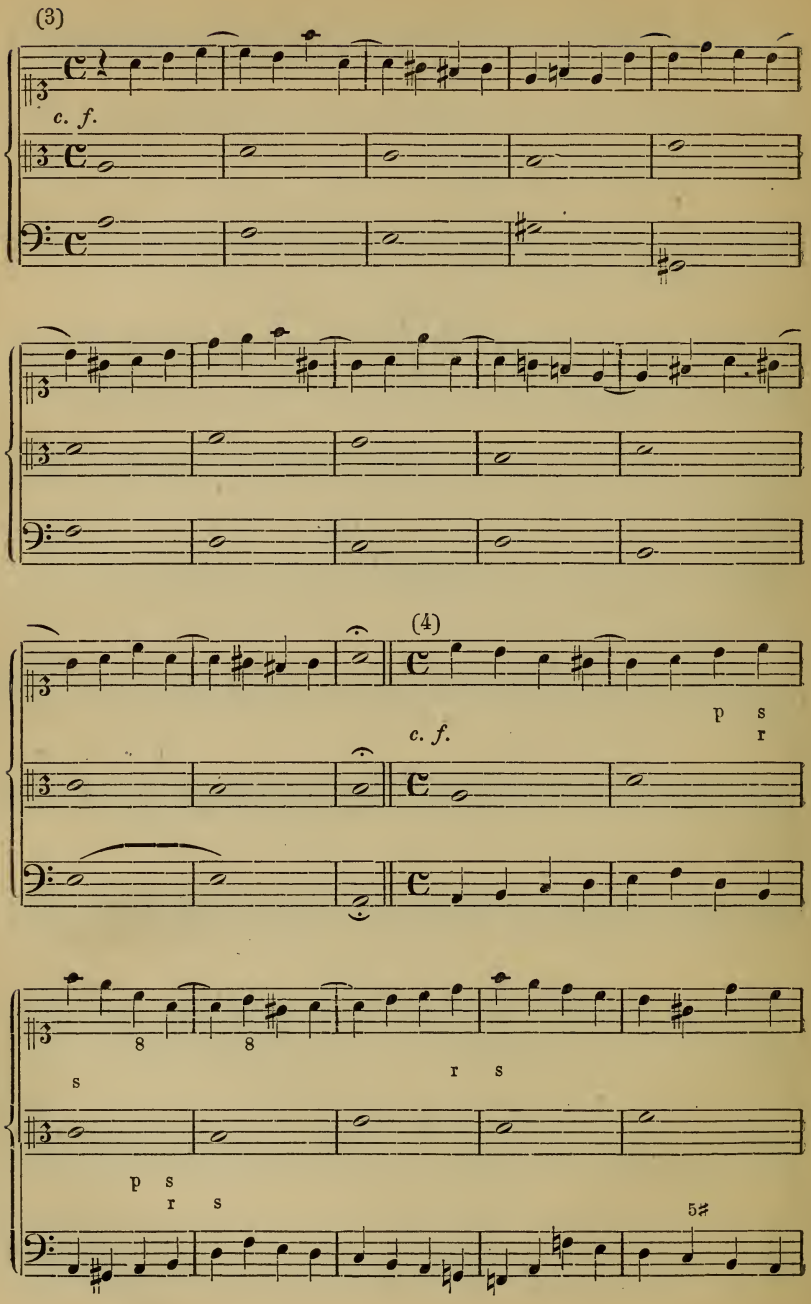
When the two parts having the counterpoint are in half-notes it is not necessary that both should begin with the first measure; either may begin on the arsis of the second measure, *e. g.*

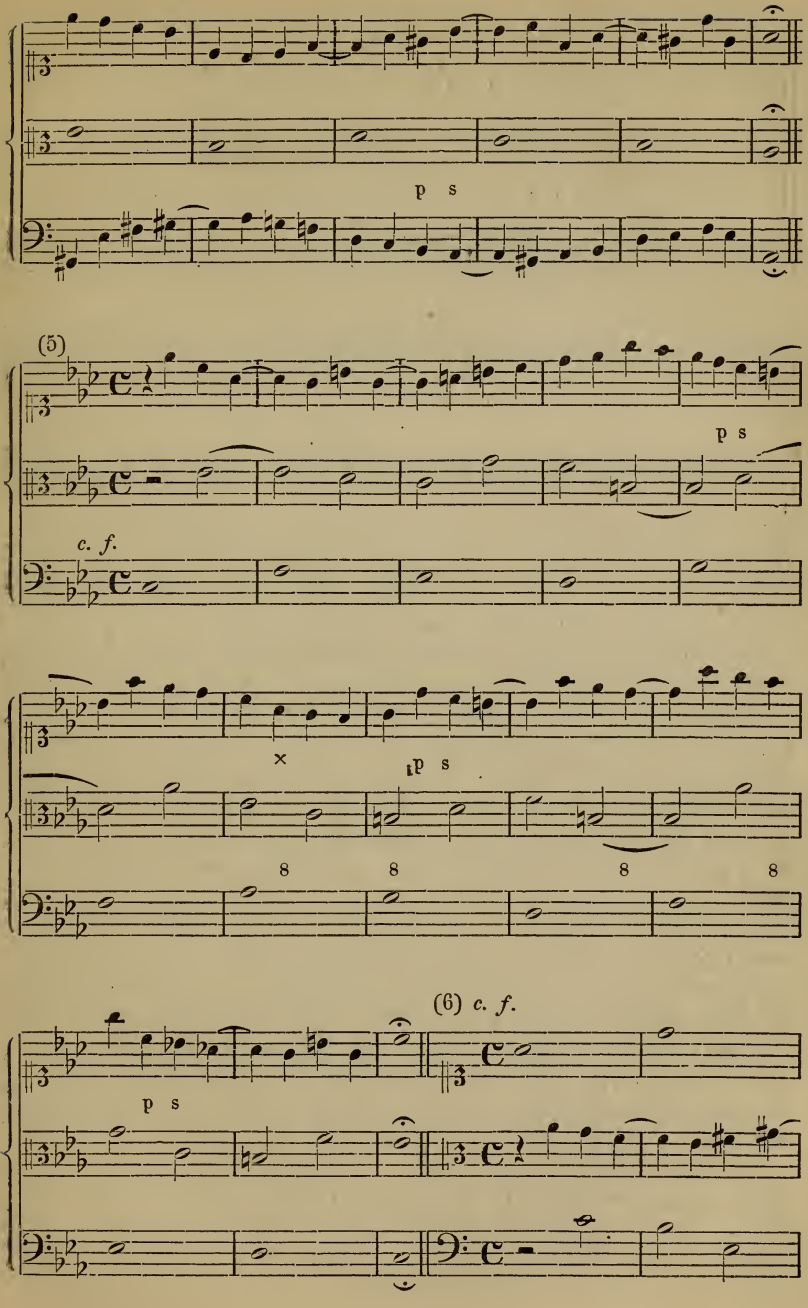


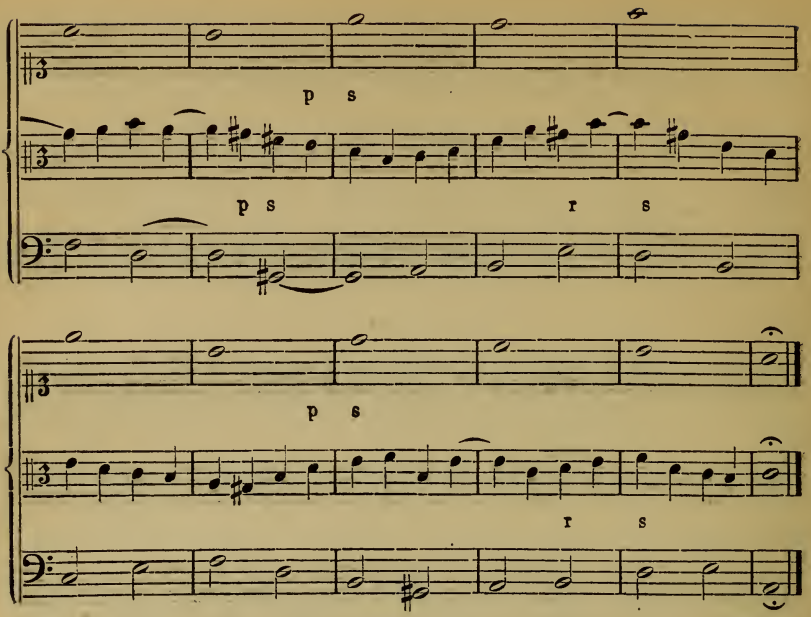
Exercises in Half-notes.



4 Model Exercises in Quarter-notes.


p
s
(2)
s r s
c. f.
p s 7 5
p s p s
r s
r s
r s
r s


(3)
c. f.
(4)
c. f.
p s r
8 8
s
r s
p s r s
5♯


p s
(5)
p s
c. f.
8
8
8
8
(6) c. f.
p s



The exercises with quarter-notes may be worked out in a different order from the preceding, on account of the difficulty at first experienced in treating the more varied melodic phrasing, which naturally renders the harmonies more complicated. The *c. f.* is first set in the bass, to which the alto is likewise written in whole notes, the soprano alone having quarter-notes; after which the alto should take the quarter-notes, with the soprano in whole notes. Then the *c. f.* is given to the soprano, the bass and alto taking quarter-notes alternately. Finally, the *c. f.* is set in the alto, with the soprano and bass alternately in quarter-notes. When sufficient dexterity has been acquired in these simpler forms, the student may try writing two parts together in quarter-notes, the several parts taking the *c. f.* in the usual succession; or, for the sake of variety, one part having the counterpoint may be written in quarter-notes, and the other in half notes (ex. 5 and 6). For such cases CHERUBINI gives the rule, that the part having the half-notes must begin after the other, on the second half of either the first or second measure, this lending its progression from the very start more melodic and rhythmic independence.

Respecting the melodic phrasing of the counterpoint in quarter-notes a few brief directions will suffice. A frequent employment of broken chords renders the harmony monotonous; it is therefore preferable to introduce tones altering the harmony, at least one such in every measure. Changing notes may be occasionally introduced, but not too often, as such

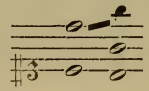
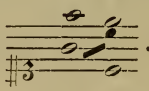
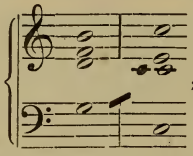
chromatic embellishments are apt to lend the exercises an air of affectation and mannerism not consistent with a healthy diatonic style, which is the foundation of all good composition. It is of the first importance that the student should learn to appreciate and use the wonderful resources of pure diatonic harmony. Simple progression by steps, *i. e.* the use of the scale, is always in place. Long successions of thirds or sixths between two parts having quarter-notes are tiresome; but shorter ones, as in ex. 2, fifth and sixth measures, where the *c. f.* progresses in contrary motion, may sound well. Greater variety is required in the melodic figuration when only one part has quarter-notes than when they are found in two parts; for in the latter case the harmonic changes may partially compensate for a certain degree of sameness in the melodic phrases. Beginning with the eighth measure of ex. 5, a repetition of one melodic figure is found in three successive measures. Such repetitions may be employed freely where they tend, as in this case, to enhance the effect.

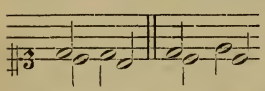
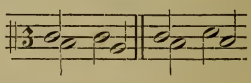
The harmonic peculiarities of these examples remain to be noticed. (2), fourth measure, the seventh g'—f'' is resolved to the fifth a'—e''. Such a resolution is made possible, in three-part counterpoint, by the presence of a third (here *c* in the bass), which, by completing the triad, effaces the empty sound of the fifth. In the last measure the resolution of the mild seventh b-a' to the *fourth* d'-g' is made endurable by the subsequent harmonies; being at the close it may pass for once. (4) The augmented fifth enters unprepared in the seventh measure; such a leading belongs to free rather than to strict harmony (though many such might be pointed out in *a cappella* compositions), and is introduced to break the monotony of the parallel sixths. It might be called *melodically* prepared. In this exercise, and the one following, are several instances of octaves formed between two parts in successive measures (marked 8) all of which are perfectly allowable. (5) The covered fifths between soprano and alto, in the seventh measure, are written in accordance with the rule given in Chap. I. (6) The bass begins on the third, leaving a doubt for the moment as to the character of the key, which is dispelled in the second measure by the leading of the alto, and the entrance of the dominant chord of the seventh. The harmonic effect is peculiar, and may be occasionally resorted to in variations. The dissonances in the seventh measure between alto and soprano are resolved by the *bass* in the next measure, as explained on page 44.

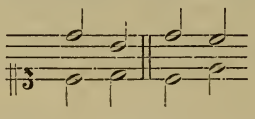
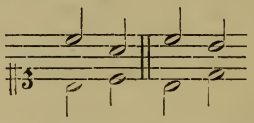
CHAPTER III.

Resolution by Substitution.

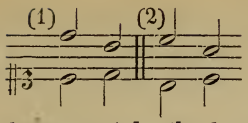
It is the object of this chapter to present in systematic arrangement the scattered examples of resolution by substitution heretofore given, and to further elucidate the subject before proceeding to four-part counterpoint.

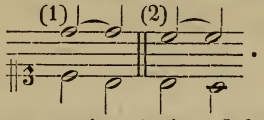
The simplest form of this species of resolution is that in which either part is resolved to a tone an octave below the one required by the regular resolution, *e. g.*  or:  . In the first example g' is substituted for g'' in the soprano; in the second c' is substituted for c'' in the alto. It is apparent in these, as well as in the subsequent examples of resolution by substitution, that the axiom, respecting the unchanged harmonic value of a tone when transposed into a higher or lower octave, is valid. The above form is often met with in four-part harmony at the close, *e. g.*  , and may also be employed, even with a major seventh, in the midst of a composition.

In the next variety *both* parts are resolved to tones other than those required by the regular resolution. The second has two forms:  for the major second, and:  for the minor second. These occur only when two parts cross.

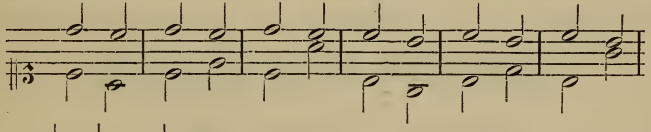
The corresponding resolutions for the ninth are:  and:  .

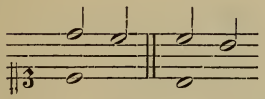
In each example the first form alone is an instance of true resolution by substitution; the second form is a regular resolution of the ninth, this ninth being resolved to the octave of the fundamental, leaving the latter free to progress to any consonant interval (excepting, in two-part counterpoint, the perfect fourth or fifth.) Where the ninth moves two steps down-

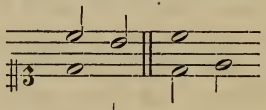
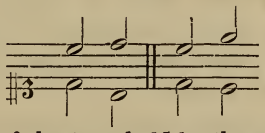
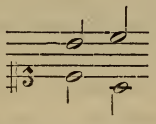
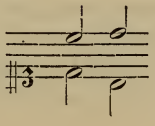
ward: *(A)*  the fundamental is *not free* in its progression, but must take the lower octave of the ninth; for these progressions are the precise inversion of the following: *(B)*



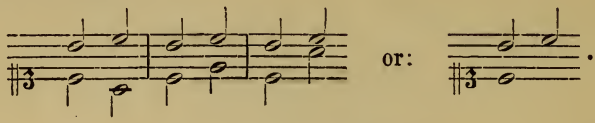
Under *A* (1) the *b'* in the soprano is substituted for the *b* in the alto under *B* (1), and the *d'* in the alto is substituted for the *d''* in the soprano under *B*. Under *A* (2) the same principle is adhered to, the *a'* in the soprano being substituted for the *a* in the alto under *B* (2), and the *c'* in the alto for the *c''* in the soprano. Compare the above resolutions by substitution under *A* with the following regular resolutions of the ninth:

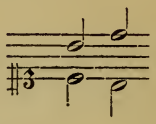
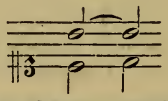


or:  , and the difference in principle between the two modes of resolution will be evident.

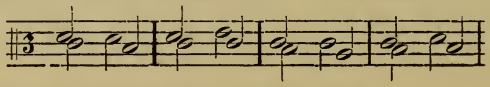
The resolutions of the seventh present similar points of difference. The regular resolutions of the minor seventh:  are transformed by substitution thus:  ; that is, the soprano takes the higher octave of the tone held by the alto in the regular resolutions, the alto taking the lower octave of the tone held by the soprano in the regular resolutions. With the major seventh, the regular resolution:  must not be confounded with the resolution by substitution of the minor seventh:  . These instances, al-

though alike in appearance, are quite unlike in their nature; for one of the natural and regular resolutions of the major seventh is to the octave of the fundamental, this fundamental being left free to progress to any consonant interval, *e. g.*

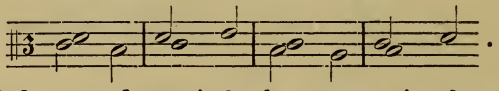


The resolution of the major seventh by substitution:  is the inversion of the regular resolution:  .

All resolutions of ninths and sevenths by substitution given above are the exact converse of the resolutions of the seconds before shown:



which are simply inversions of the regular forms:

 .

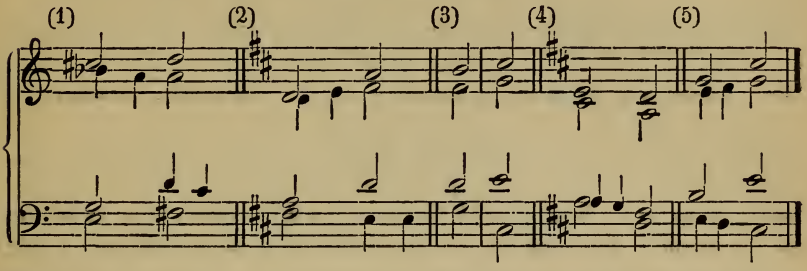
In the case of the seconds precisely the *same tone* is taken by either part as would have been taken by the other part in the regular resolutions. In the case of the sevenths and ninths the *octave of that tone* is taken by either part which would have been taken by the other part in the regular resolutions. All these modes of resolution by substitution, which exhibit simple relations of intervals without reference to the position of the latter in chords, may be used with discretion in any form of simple counterpoint with any number of parts.

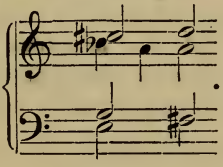
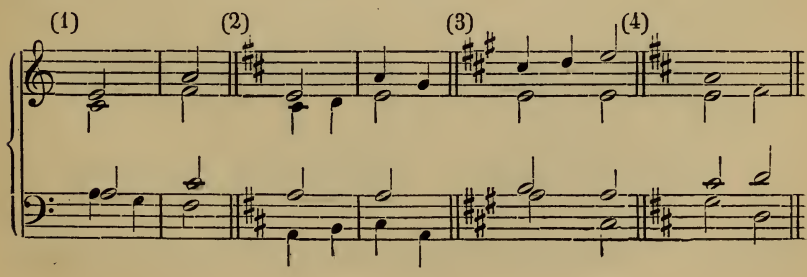
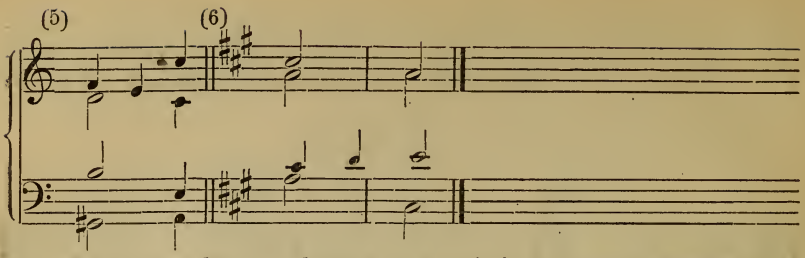
Where three or more parts progress together the forms of resolution can be made more varied and complicated. Not only the relations subsisting between the two tones forming any given dissonance have to be taken into consideration, but also the harmonies which may be produced through the aid of other parts, (for instance, the restrictions respecting the progression of dissonances to perfect intervals become void). Four-part counterpoint in particular offers a wide field for the employment of bold and semi-irregular harmonic combinations. The immutable principle underlying all these is expressed in the oft-repeated axiom: the octave of any given tone possesses the same harmonic value as the tone itself.

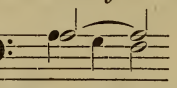
Resolutions formed by the help of any part besides those two between

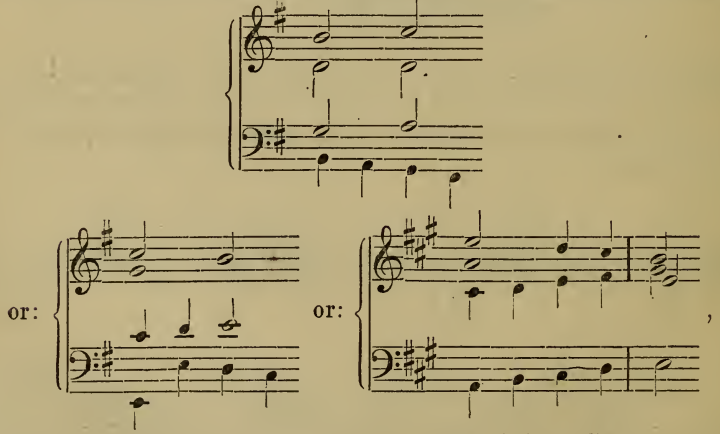
which a dissonance is actually formed may be classed under two heads: (1) where a third part takes a tone, which in the regular resolution would have been taken by one of the parts constituting the dissonance; (2) where a third part takes the octave of such a tone.

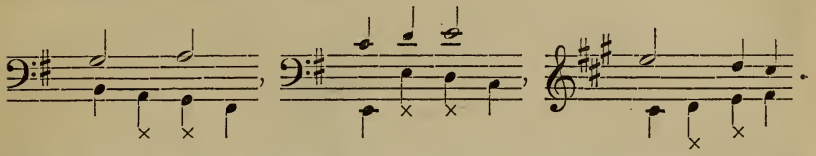
Instances of the first class are the following:



Under (1) we have a chord of the third and fourth e-g-a'-$c''\sharp$, the second inversion of the chord of the seventh A-$c\sharp$-e-g. The regular resolution of the seventh g in the tenor would be to $f\sharp$. Instead of progressing downward to $f\sharp$ the tenor skips upward to d', which progression is no resolution whatever of the dissonance; but for this $f\sharp$ not taken by the tenor the bass $f\sharp$ is substituted, forming with the tones above the chord of the sixth $f\sharp$-d'-a'-d'', which same chord (merely leaving out the d') would also have been formed if the tenor had been regularly resolved to $f\sharp$, doubling this tone with the bass:  . The remaining cases are to be explained in a similar manner. On examination of these it will be seen that this species of resolution is rather a matter of *chords* than of intervals. The same principle lies at the root of the following examples of the second class:



Ex. 1 contains a chord of the second *g-a-c'-e'*; the regular resolution of in the second *g-a* would be:  . Instead of holding *a* the tenor skips to *c'*, forming with the bass *f* a fifth, which is no resolution of the second. But, for the *a* in the tenor, an *a'* in the soprano is substituted, having the same harmonic value as the *a*, and therefore making the resolution agreeable and complete.

There is no reason for discountenancing an occasional use of such modes of resolution in working out the exercises, provided they are employed intelligently. The study of JOH. SEB. BACH'S works, particularly of his "371 Four-part Choral-Songs" [371 Vierstimmige Choralgesänge, Leipzig, Breitkopf & Härtel] will give the student the best insight into the possibilities of diatonic harmony. It is not necessary that he should imitate BACH in writing parallel fifths, sevenths and ninths; such harsh progressions can be overlooked in the case of a composer having such a sovereign command of contrapuntal form as BACH, but are inexcusable when intentionally written by beginners. Attention must also be called to the following forms of progression which frequently occur in BACH'S scores:

in which a seventh formed between any two parts is immediately succeed-

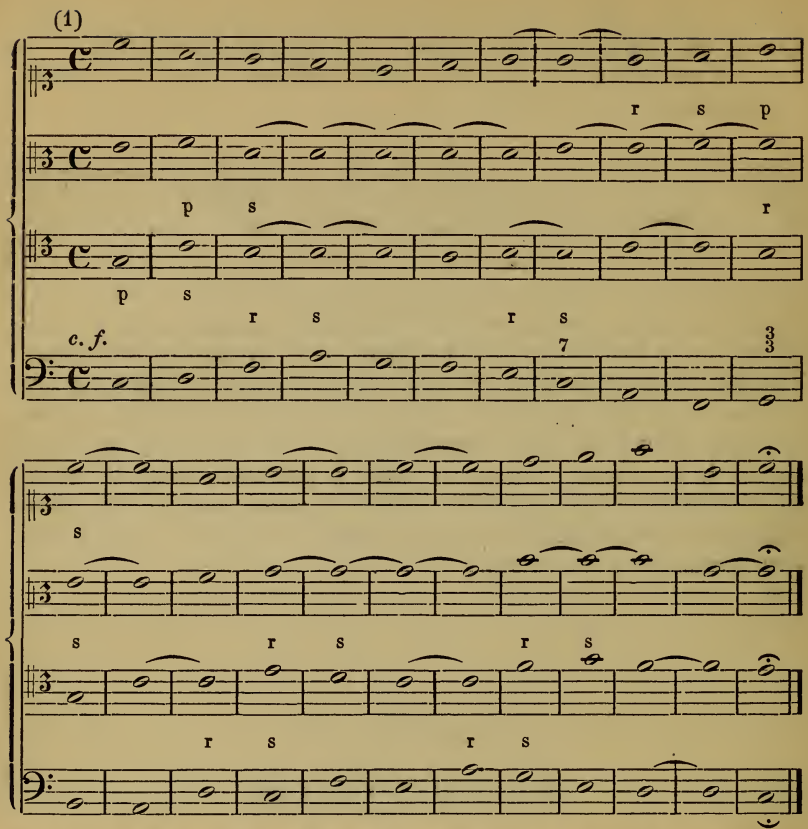
ed by a ninth between the same parts, or *vice versa*. These cases have already been alluded to in the chapter on two-part counterpoint. In a two-part movement they produce an unsatisfactory effect, because the first dissonance is left unresolved:

The effect is least unpleasant when the ninth precedes the seventh; firstly, because the natural resolution of the ninth is to the octave of the fundamental, as in the first and last examples (in the former the fundamental is treated like an inverted ninth); and secondly, because in four-part harmony other intervals consonant to the ninth so resolved are present, making the progression more like a true resolution. In the case of the minor seventh in the second example the matter is essentially different, the regular resolution of this seventh not being upwards, and the progression appearing correspondingly forced and harsh. It is best to avoid both of these forms in the strict style.

CHAPTER IV.

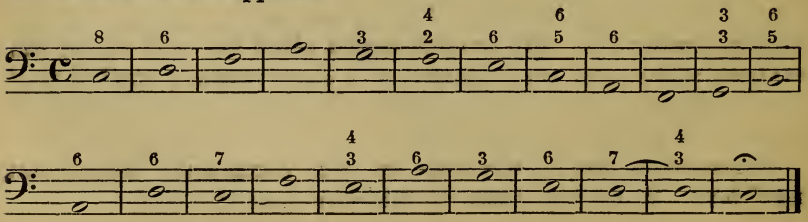
Four-part Counterpoint.

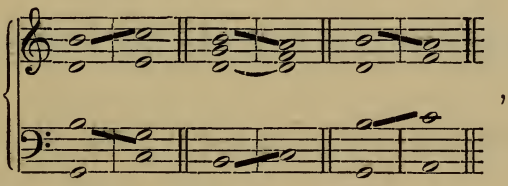
In order to present the subject systematically, the various phases of contrapuntal evolution are arranged, in this manual, in regular order. This order *may* be strictly observed in the course of study; but in most cases it will be preferable, after three-part simple counterpoint has been fairly mastered, to combine the study of two or even three sections, thus affording a welcome relief from the monotony caused by long-continued practice with an unmetrical *cantus firmus*. According to the judgment of the teacher the chapters on Figurate Counterpoint, on the Choral, or even the beginning of Invertible Counterpoint, may be taken up together with the present one. The two first-named afford the most variety and contrast, at the same time admitting of a direct practical application of the knowledge and skill hitherto gained, and are therefore to be chiefly recommended for the purpose in view.

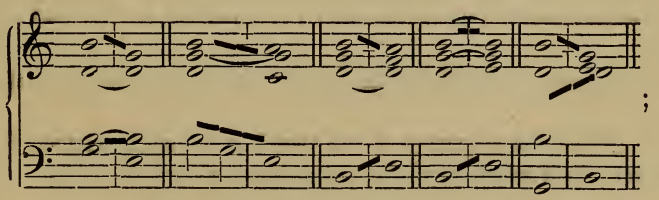
The exercises, like the foregoing, are to be begun in the "note against note" form. At the first glance the following example:



might seem to be nothing further than just such a four-part exercise as those with which we became familiar during the course of harmony. A more careful examination of this example will, however, show that the freedom of progression attained through the study of counterpoint has exercised no inconsiderable influence on its harmonic structure and on the leading of the several parts. If the same *c. f.* be harmonized according to the *chords* given in the manual of harmony, the difference in treatment will at once become apparent.



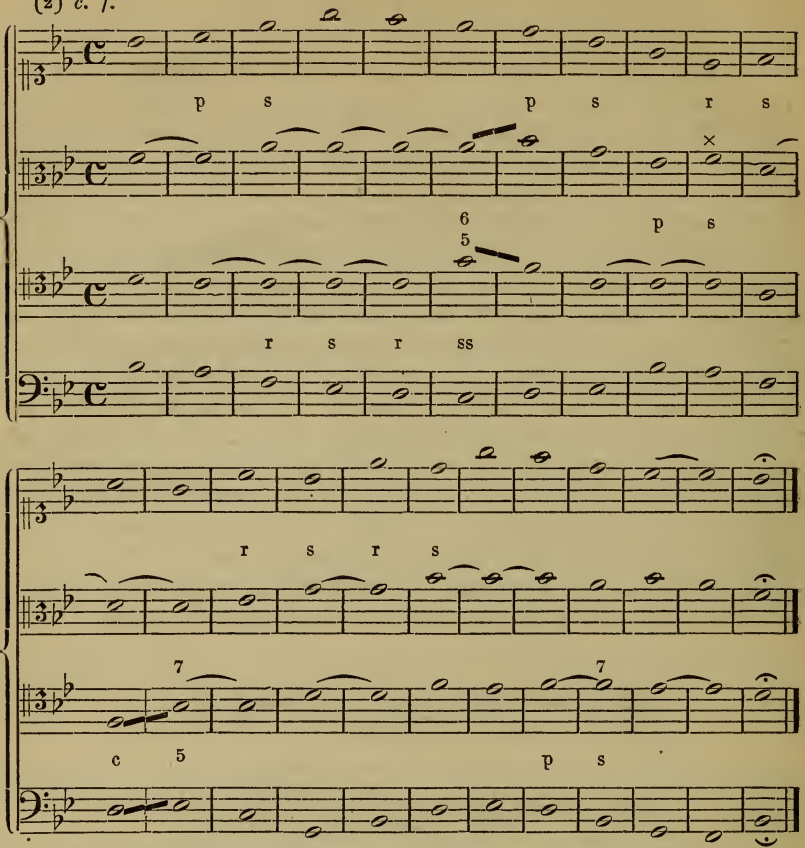
The student is invited to try the experiment of writing out the harmony indicated by this figuring, beginning in close position; this harmony is much more simple and transparent than that of the example. But just this simplicity of form the student is supposed to have learned to understand and apply in studying harmony. His ear must gradually be trained to seize and comprehend more complicated and unusual combinations. Consequently, after working out an exercise in the simple shape presented by the figured bass, employing regular resolutions, he ought to attempt at least one variation of the same, endeavoring to introduce as many new harmonies as possible, without allowing the harmonic structure to become disjointed or bizarre, and with due regard for the melodic leading of the soprano at least; the middle parts may at first be used as an harmonic filling. The instances of preparation and resolution by substitution in the model example should be conscientiously studied. In the eighth measure the resolution of the major seventh is a regular one. In the eleventh measure the dominant third is doubled. This doubling of the leading-note has been persistently decried by the theorists, for no better reason than this: that it is melodically attracted to the tonic, and that a progression of the doubled third to the tonic would produce parallel octaves. The requirements of this melodic attraction are nevertheless amply satisfied when *one* of the parts having the doubled third progresses to the tonic:

or even if *neither* of them progress to the tonic:

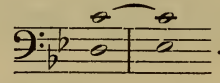
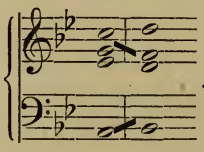


in other words, there is no real reason why the dominant third should not be doubled like any other major third.

The next model exercise, with the *c. f.* in the soprano:

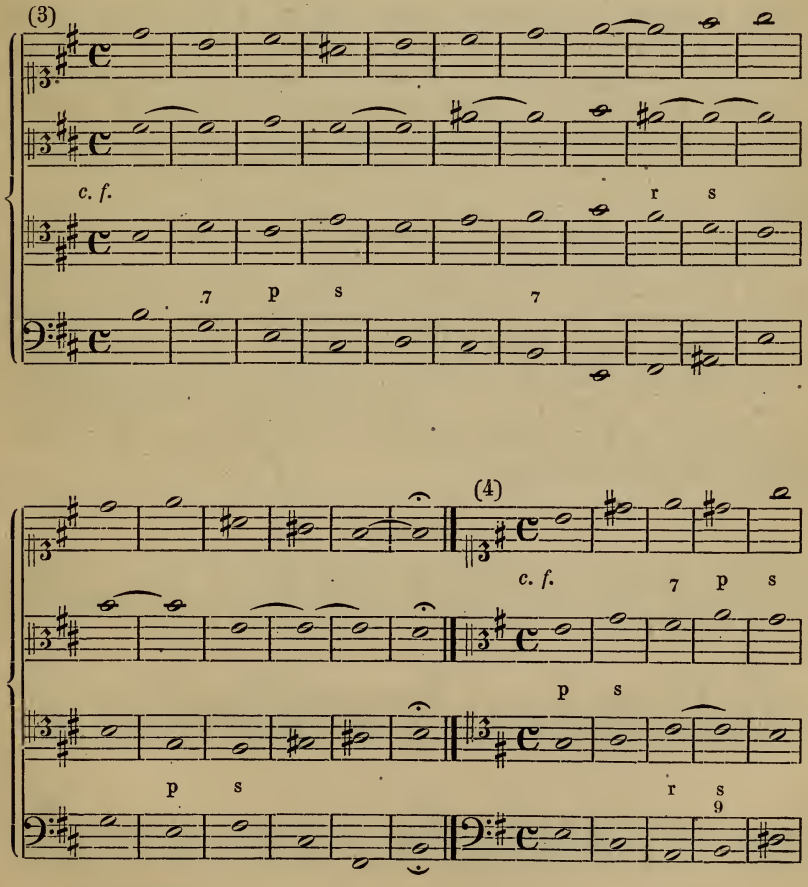
(2) *c. f.*

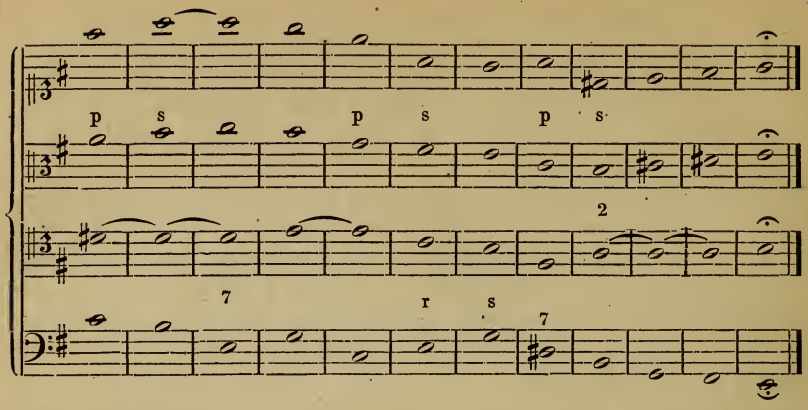


presents various points of interest. The instance of resolution by double substitution, in the sixth measure, is similar to those explained on p. 44, an $e''\flat$ in the soprano being substituted for the $e'\flat$ which the tenor would otherwise have been obliged to take as a substitute for the bass $e\flat$ in the regular resolution: . The chord of the $\frac{6}{5}$ in the same measure is resolved regularly to the chord of the sixth derived from the tonic triad; the resolution of the fundamental chord would be:



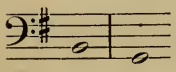
The covered fifths between bass and tenor, marked c^5, are harmless. Why? — In the tenth measure (×) alto and soprano cross, affording an opportunity for a resolution of the second by substitution. This crossing was not absolutely necessary, as the $e'\flat$ might have been held by the alto, but it gives more variety to the leading of this part, as well as to the general harmonic effect.

The exercises having the *c. f.* in either of the middle parts are more difficult. A good melodic leading of the outer parts, and an agreeable harmony, are the prime requisites; it is at present of more importance to observe the former condition than to build up a complicated harmonic structure with new and startling effects. These latter are nevertheless not to be despised where they can be brought in without making the melody stiff and awkward.



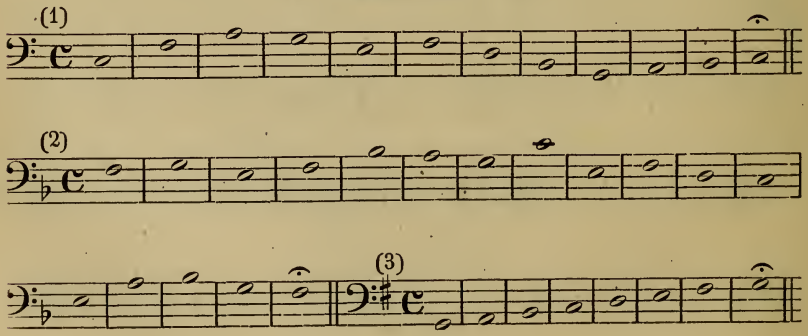


No. 3 calls for no particular remark. In No. 4 the peculiar effects caused by the suspension of the ninth in the fourth measure, and of the seventh in the eighth measure, should be noticed; through the latter especially a too sudden resolution of the dominant chord of the seventh to the tonic triad *in the fundamental position*, which should not take place in the midst of an exercise, may be prevented. The bass progression:



under 2 may seem incorrect; but the upward step of the alto *b* to *c'*♯ resolves the dissonance *a*—*b* as a second, leaving the bass *B* free to progress to *G*. In the third measure the chord of the seventh on the second degree enters without preparation, its dissonant effect being so mild that preparation is hardly necessary, even in *a cappella* composition, when the chord enters so easily and naturally. The same remark is applicable to the diminished chord of the seventh on the seventh degree (thirteenth measure).

Exercises.



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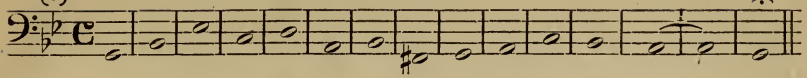
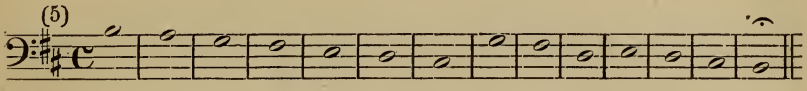
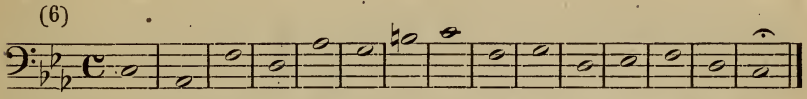


(5)

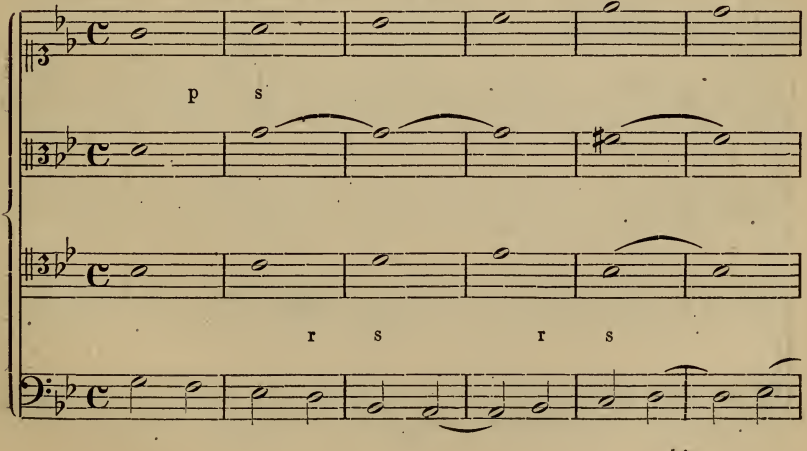
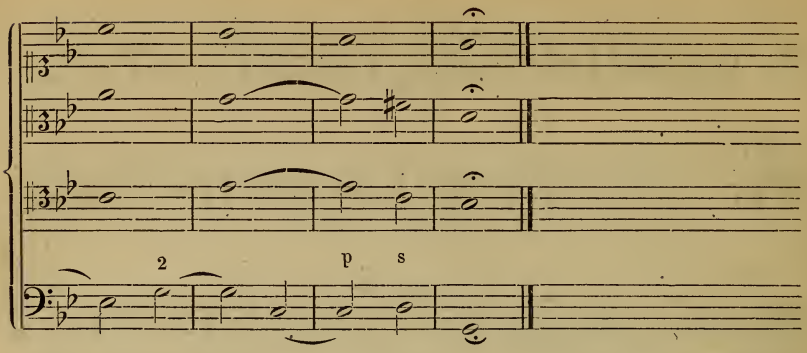


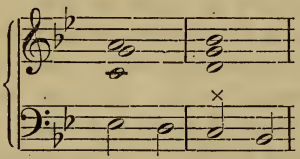
(6)

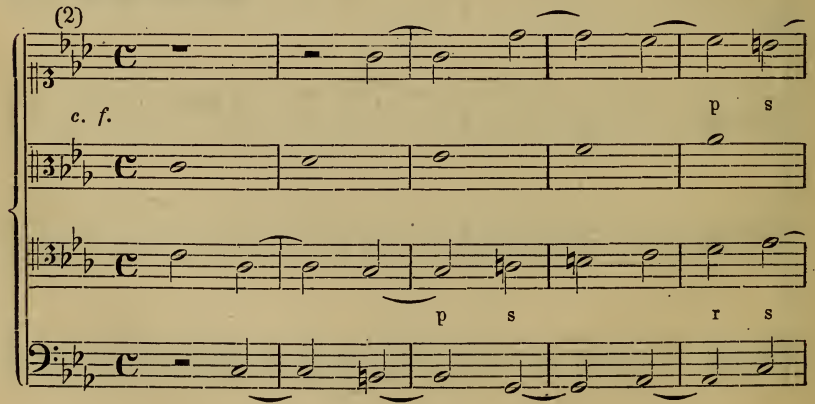


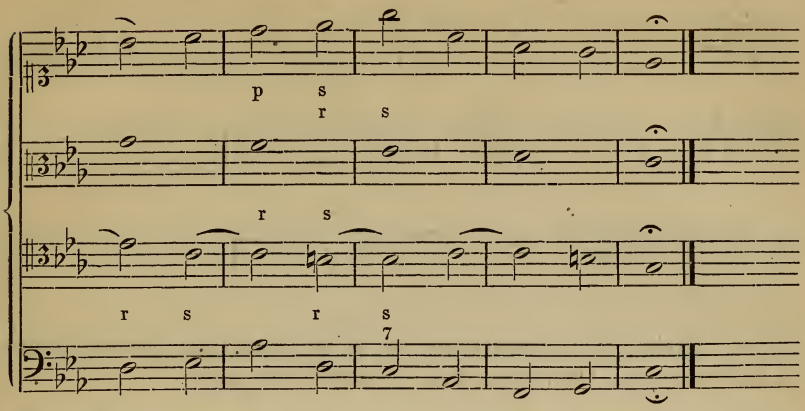
The exercises with half-notes may now be taken up. The *c. f.* is first set in the bass, with the half-notes in the soprano alone; the soprano then takes the *c. f.*, with the bass only in half-notes. The *c. f.* is next set in the tenor, with the half-notes in the alto, the outer parts being written in whole notes; and finally, the *c. f.* is set in the alto, the tenor being in half-notes, and the outer parts as before. If the student be able, still further variations may be attempted, each part taking the *c. f.* in the above order, to which any two, or even all, of the other parts are written in half-notes. Of course the correct treatment of such variations requires a considerable degree of skill, perhaps more than the average pupil will have gained during the preceding course of counterpoint; instead of these the harmonizing of chorals, with variations in half-notes, is often preferable. This point must be left to the judgment of the teacher. Two examples only will be given.

(1) *c. f.*



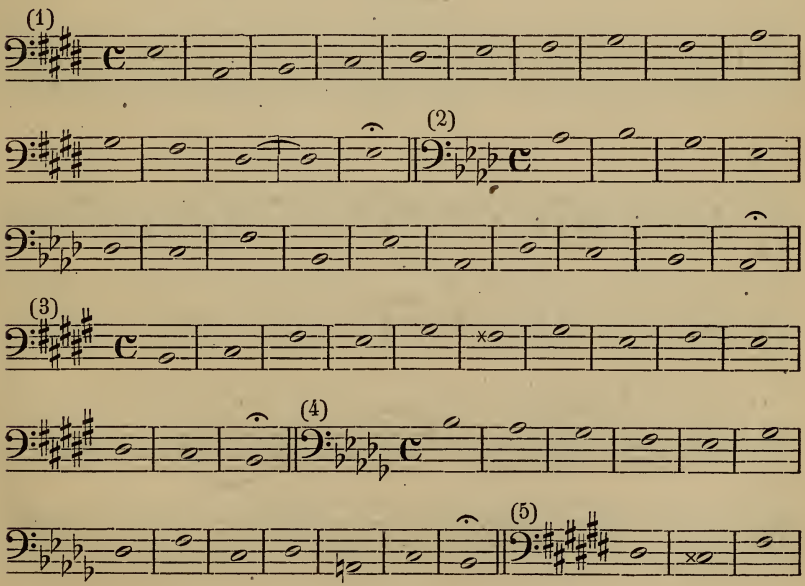
The case of resolution by substitution in the third measure might be written:  which gives a more flowing bass, and is therefore melodically the more agreeable, though the resolution in the example is more strictly correct. In such cases BACH usually (if not invariably) chose the melodic phrasing just given, in which the unresolved minor seventh passes into a ninth (see end of preceding chapter). It is nevertheless advisable to observe the rule that every dissonance must be properly resolved. In the seventh measure the alto a' is treated like a ninth, and resolved to g', this making the chord fuller than if the a' were treated as fundamental in a chord of the second (which it actually is), and resolved accordingly to $b'\flat$. In order to form a good close, half-notes are written in the tenor and alto; this device may be resorted to in any difficult situations.

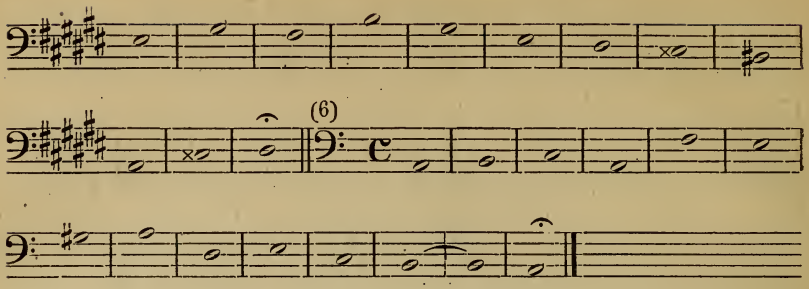




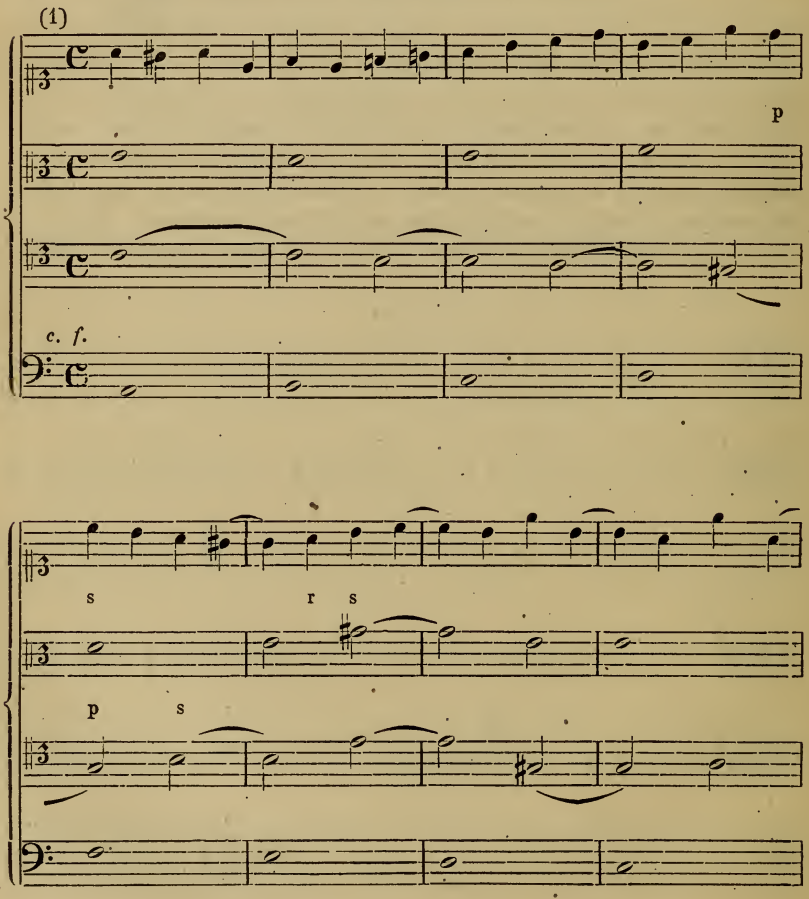
The successive entrance of the various parts shown in the above example often produces a very good effect—gives their entrance more "élégance", as CHERUBINI puts it. Besides, the molody of the *c. f.*, beginning uncovered by the soprano, and continuing its progression through the pauses, caused by syncopation, of the other parts, attracts attention and appears independent from the very outset. As it is often a *desideratum*, in practical composition, to bring some particular melody into prominence, the above manner of attaining that end may be practiced when opportunity offers.

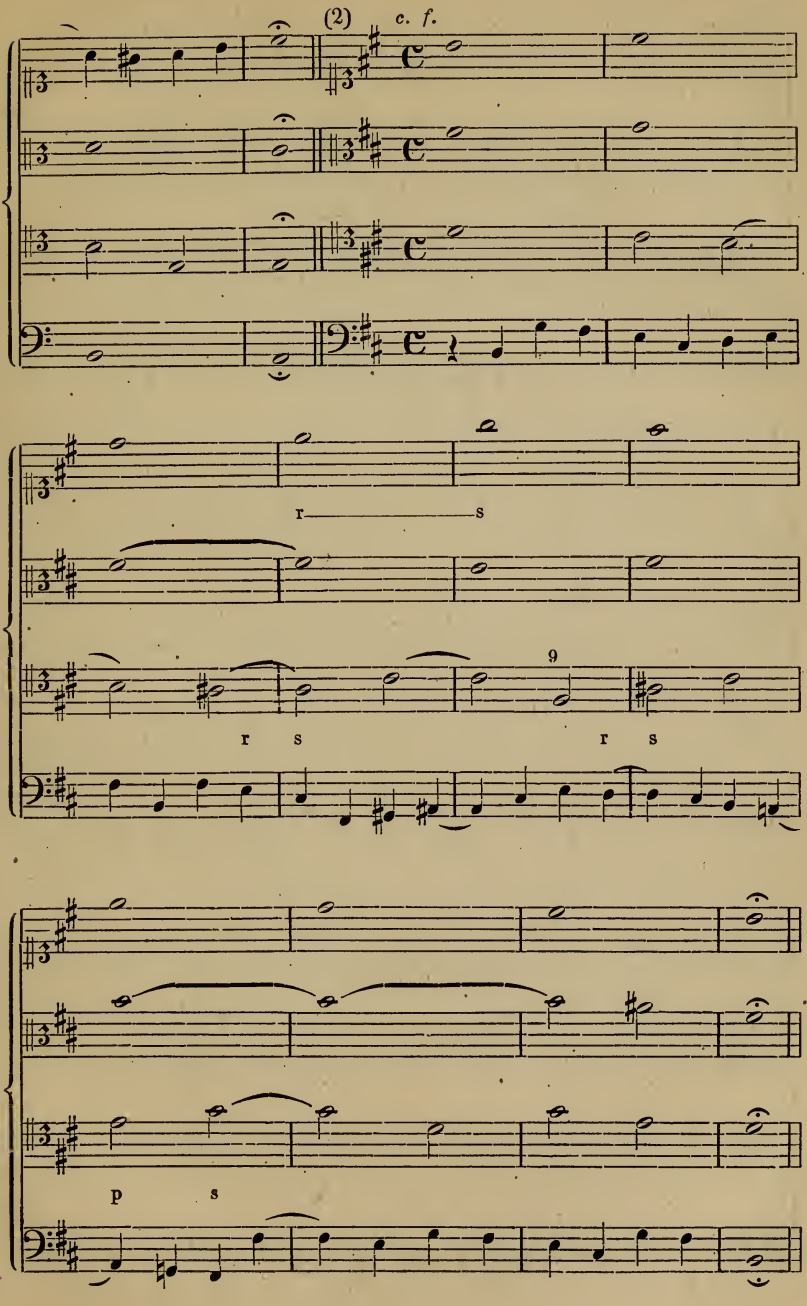
Exercises.

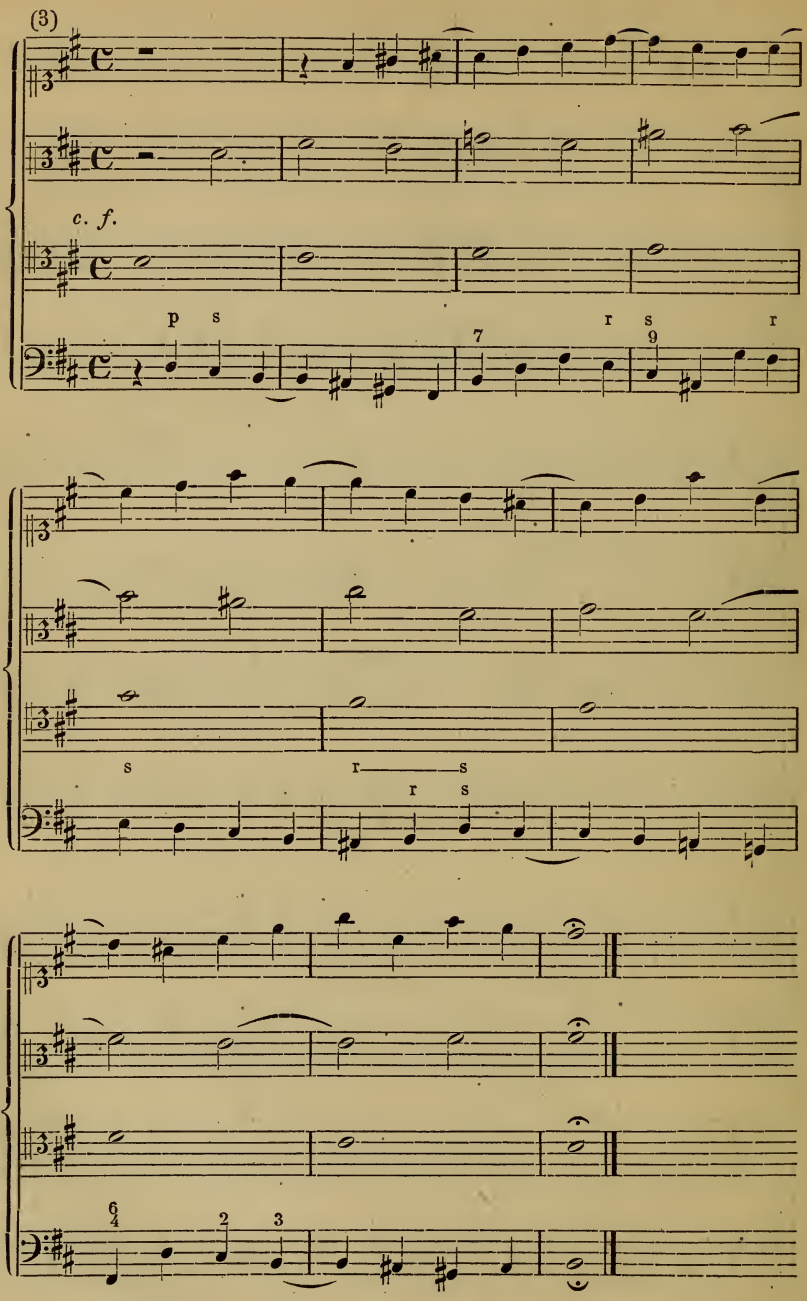




The exercises with quarter-notes are to be taken up in the same order as the preceding. Only three model examples are given:



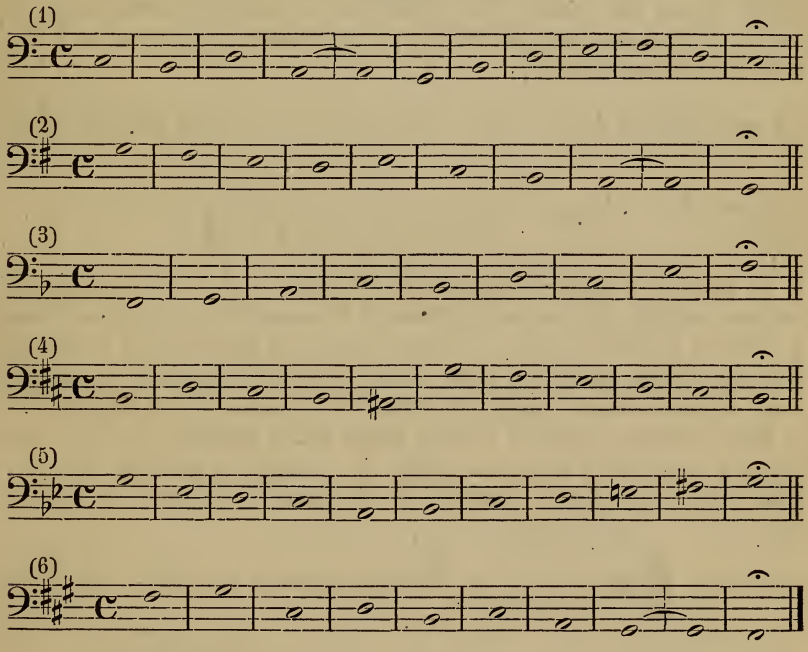

(2)
c. f.
r s
9
r s
r s
p s


(3)
c. f.
p s
7
r s
9
r
s
r s
r s

In each of these examples one of the middle parts takes half-notes, which treatment often promotes a much smoother and more melodious leading of the parts having the quarter-notes than could otherwise be attained. The exercises may be written in this way, or an occasional half or quarter-note may be introduced in any part except that which has the *c. f.*, whenever such procedure enables the melody of the parts having the quarter-notes to assume an easy and unconstrained progression.

If the explanations of harmonic and melodic progression already given have been intelligently followed, the combinations found in these examples will call for no further remark.

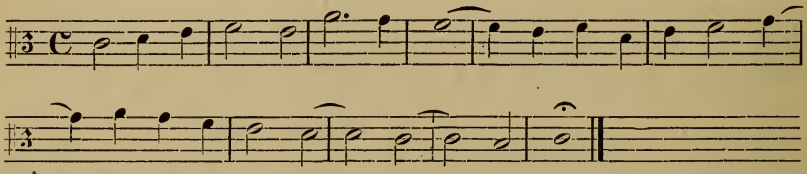
Exercises.



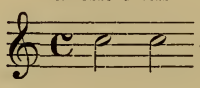
CHAPTER V.

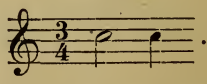
Figurate Counterpoint.

While in all the preceding exercises, whether in equal or unequal counterpoint, a regular and certain proportion was observable between the tones of the *cantus firmus* and those of the free parts, the ensuing examples show a considerable variety in the rhythmical values and relations of the tones in the several parts. This chapter constitutes a direct introduction, not only to Invertible Counterpoint, but also to the simpler forms of the Canon and Fugue. The *cantus firmus*, instead of progressing by tones of equal duration [see Note IV] is presented in the shape of a free and unconstrained melody.



If we attempt to set a counterpoint to the above *c. f.*, it will immediately become evident, that the main difference between this exercise and those heretofore worked out lies, not in the nature of the intervals occurring between the two parts, for these intervals must of necessity be just the same as those already employed; but in the character of the *rhythm*.

Every measure may be divided into a thesis (accented division) and an arsis (unaccented division). When the measure is divisible into two equal parts, the length (duration) of the thesis is the same as that of the arsis: 

. When the measure is divisible into three equal parts, the arsis is half as long as the thesis: 

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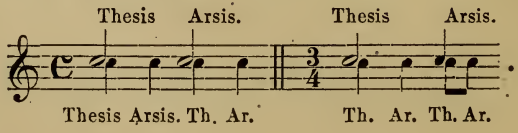
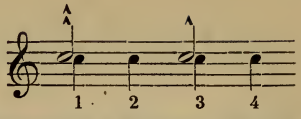
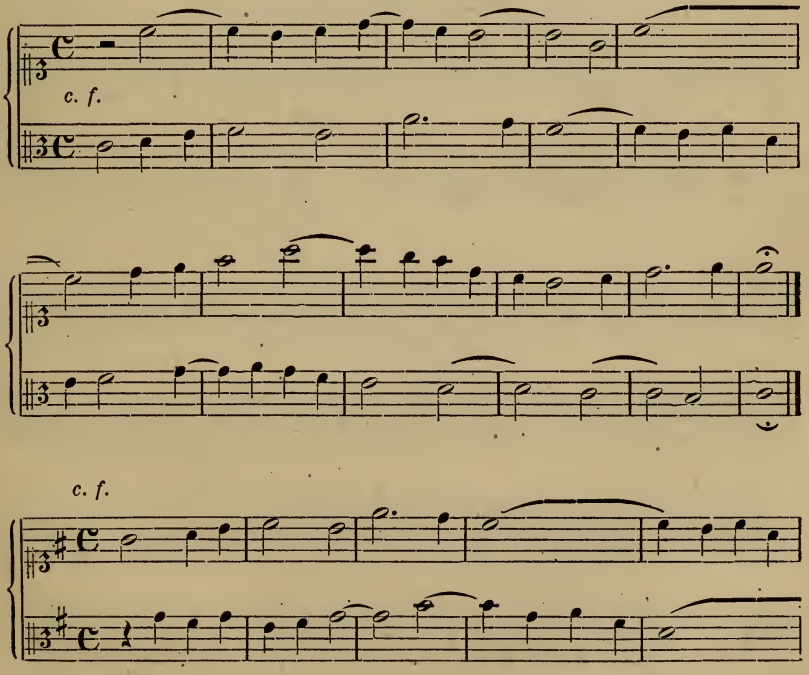
But in each measure subdivisions can be made, as any thesis or arsis may be again divided into a thesis and arsis:

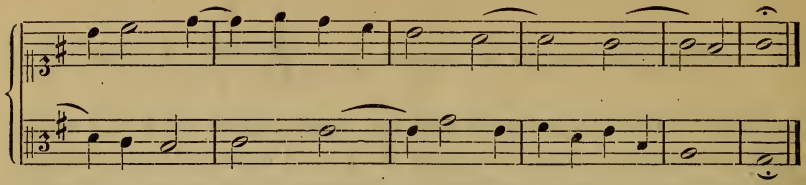


On examining the example in common time:



we perceive that its most prominent and characteristic *rhythmical* feature is the accentuation of the first and third (sub) divisions of the measure. Now, to obtain a steady and flowing movement in the exercise before us, or in one of like character, *these two accented divisions*, upon which the rhythmical progression chiefly depends, must be marked, in one or the other part, by an accented tone; *i. e.* both parts together cannot be held over either of these accented divisions, but one or the other part must move. The simplest mode of fulfilling this principal condition is, to write the counterpoint in half or quarter-notes, always moving when the *c. f.* is held over an accent. But this way of working out the exercises would be too similar to that till now practiced to be of real benefit; if an actual advance in the treatment of the forms of simple counterpoint shall be shown, this mechanical method must give way to a freer and more spontaneous leading of the counterpoint, corresponding to that of the *c. f.* Such a leading is most easily obtained by opposing to the notes of the *c. f.* notes having a different rhythmical value. E. g.



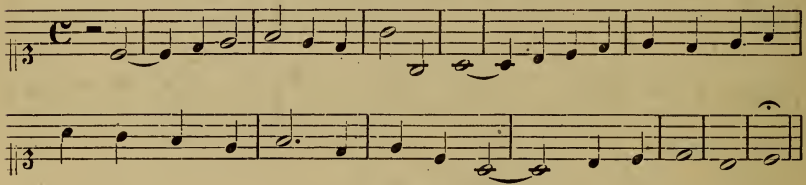


We find in almost every case that the notes of either part are opposed by notes having a different rhythmical value in the other part; whole notes against half or quarter-notes, or half-notes against quarter-notes; and the syncopation of an accent by one part counterbalanced by an accented note in the other.

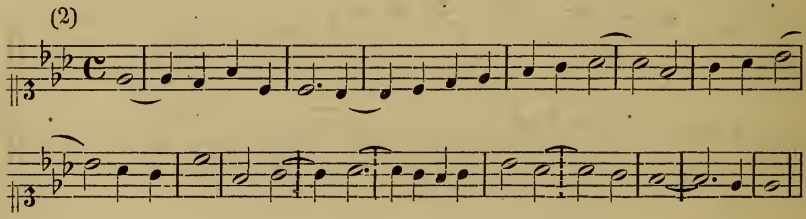
It will be felt that, as a general rule, the *first* thesis of a measure bears a half-note in both parts together better than the second, after the movement in quarter-notes has once begun; unless this movement in quarter-notes has been continued, in either part, through the first half of the same measure. It also renders the rhythmical progression more flowing to take up the movement in quarter-notes in the second half of a measure, in case the first half has been occupied by half-notes alone. These last remarks are not to be regarded as rules, but merely as suggestions.

Exercises in alla breve time.

(1)



(2)



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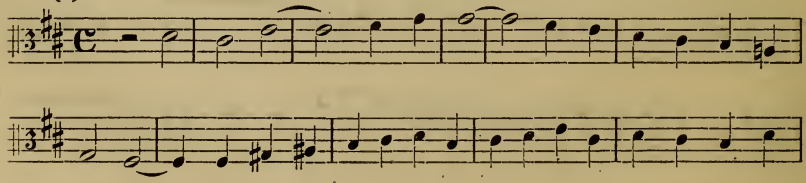

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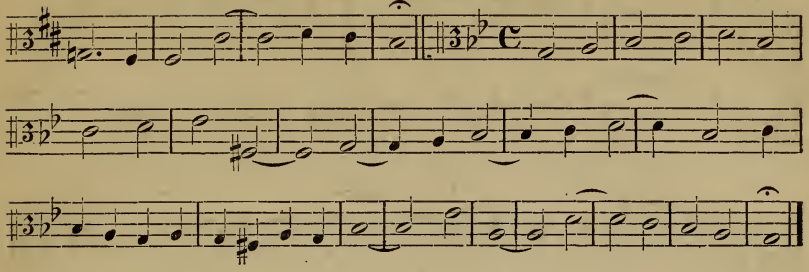
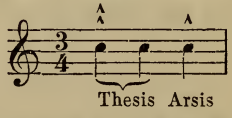
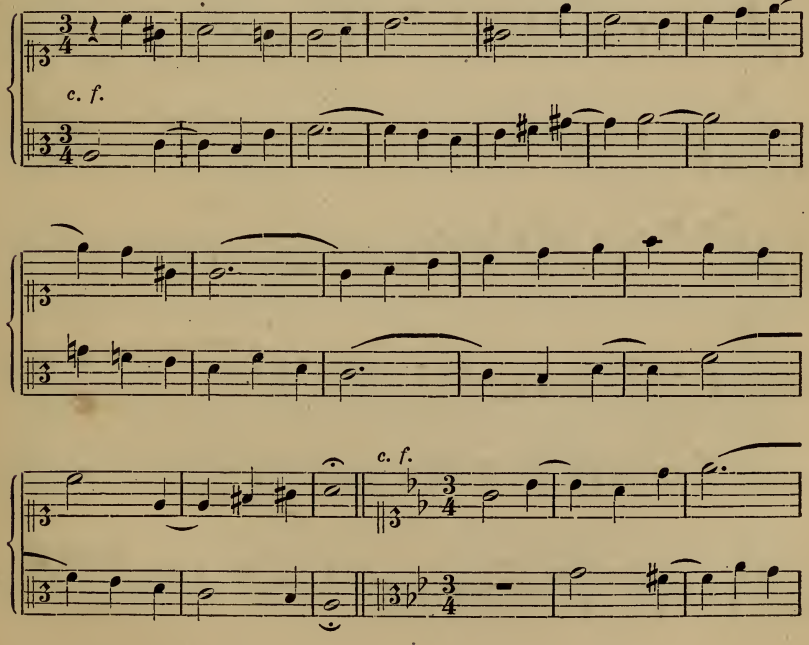


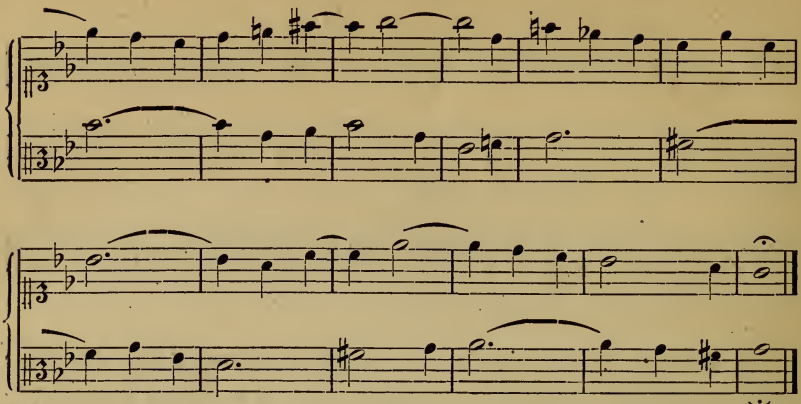
For working out the exercises in $^3/_4$ time a careful study of the two model examples given below will prove to be a sufficient preparation. In each measure are found two principal accents, the stronger on the first division, and the weaker on the third division:



;

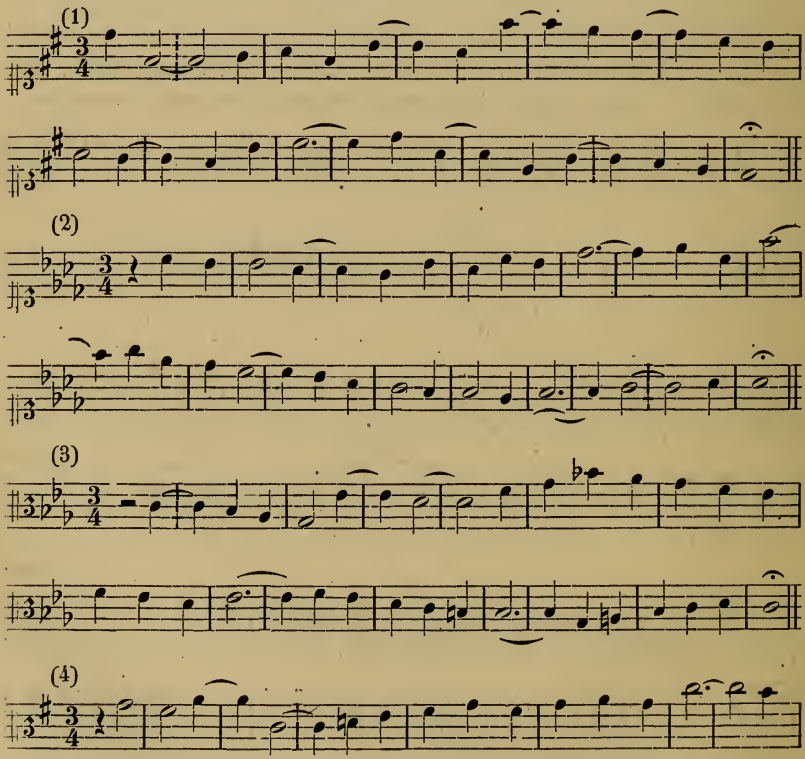
the syncopation of either of these accents in both parts is best avoided, as the rhythmical movement would thereby lose its chief characteristic. Not only each *c. f.* given below, but also that found in the model examples:

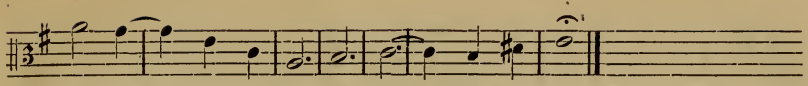




is to be provided with counterpoint, and variations of the same, both above and below the *c. f.*

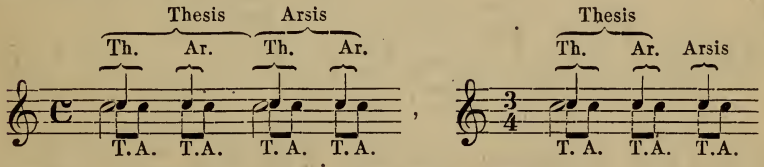
Exercises in $^3/_4$ *time.*



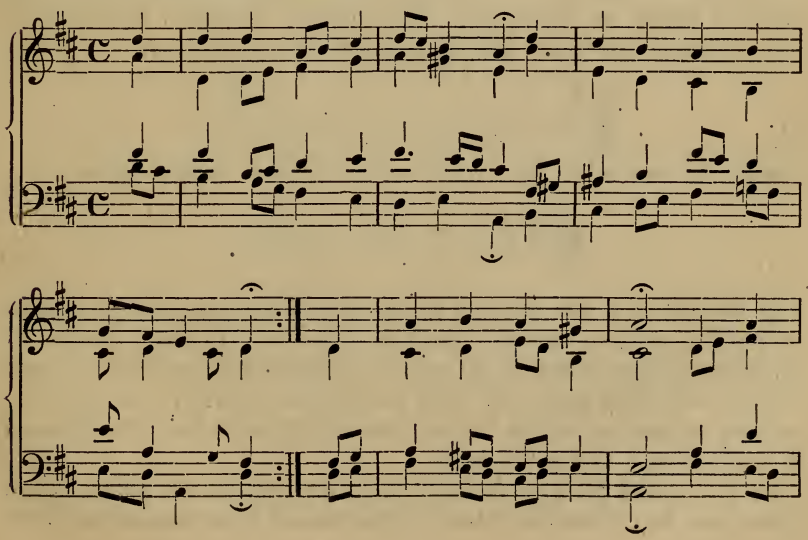


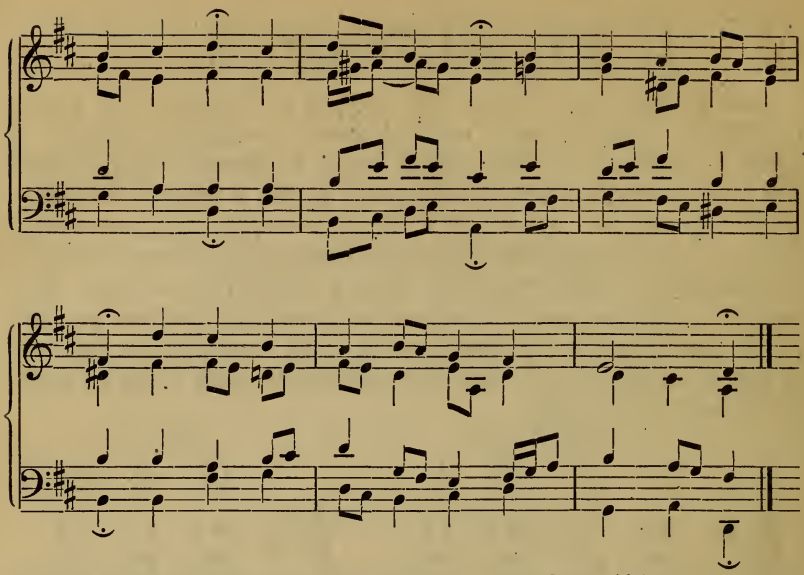
After finishing these exercises the student may attempt, if it appear desirable to continue practice with like themes, to compose melodies, to which a counterpoint is afterwards to be set, for himself. Such attempts will speedily convince him that not every melody is adapted for contrapuntal combinations, and will be of benefit, even if at first unsuccessful, through concentrating attention upon the character of contrapuntal forms.

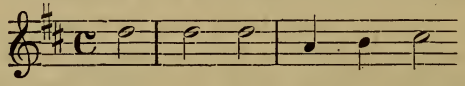
By employing eighth-notes (♪) figurate counterpoint becomes more florid, *i. e.*, a greater variety in rhythmic and melodic figuration or phrasing can be introduced into any single measure. The divisions of the measures, as already presented, are capable of subdivision, each being separated into a thesis and an arsis:

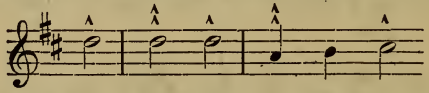


It must be remarked, that the notation of a composition in quarter or eighth-notes does not necessarily imply that its *tempo* is faster than that of another composition written in half or quarter-notes [see Note V.] As an example LUTHER's choral: "Ein' feste Burg" [No. 20 of J. S. BACH's 371 Choral-songs] here follows:

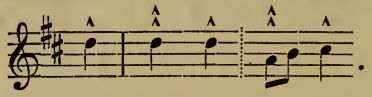




It would make no difference in the *tempo* of this choral if it were written in half-notes:  etc. which is the usual manner of notation. A matter of more immediate importance to us is, that the mode of subdividing a measure exhibited in this choral likewise makes no difference in its *rhythmical* character, provided the *tempo* remains unaltered. The main accents with half-notes:



remain the same when the composition is written in quarter-notes:



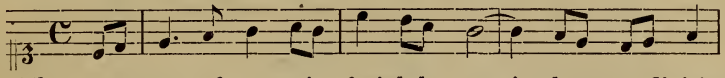
The absence of a bar (marked by the dotted line) and the consequent subdividing of the measure into four accented and four unaccented divisions (as represented by the pairs of eighth-notes), leave the property of each individual thesis and arsis unchanged. Therefore, in any composition or exercise written in slow time, eighth-notes may be introduced in the same way as quarter-notes.

In this choral pairs of sixteenth-notes are occasionally found, which correspond in rhythmical value to eighth-notes in a composition whose

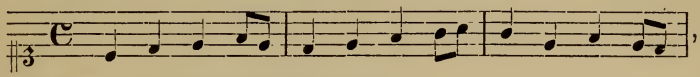
movement is twice as rapid as that of the dignified choral. For the employment of such rapid eighth-notes special rules become necessary.

1. They should progress by steps, and not by skips.

2. When they occur in isolated pairs the effect is smoother if they are set in the arsis; at all events seldom in the thesis:

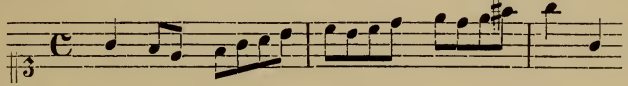


3. The recurrence of one pair of eighth-notes in the same division of several successive measures, and in the same part, is apt to make the melodic progression monotonous and "jingling":



this produces a tedious and trivial effect.

4. Rapid eighth-notes should be used sparingly in forming longer passages like this:



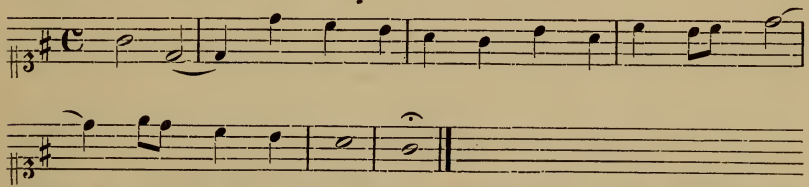
etc.

[See also Introduction].

In order to lend greater variety and interest to the coming exercises a new subject will now be introduced, which, although bearing a certain resemblance to the highest and strictest contrapuntal forms, does not belong to them, but might be termed the connecting link between these latter and those heretofore studied. I refer to the

Free Imitations

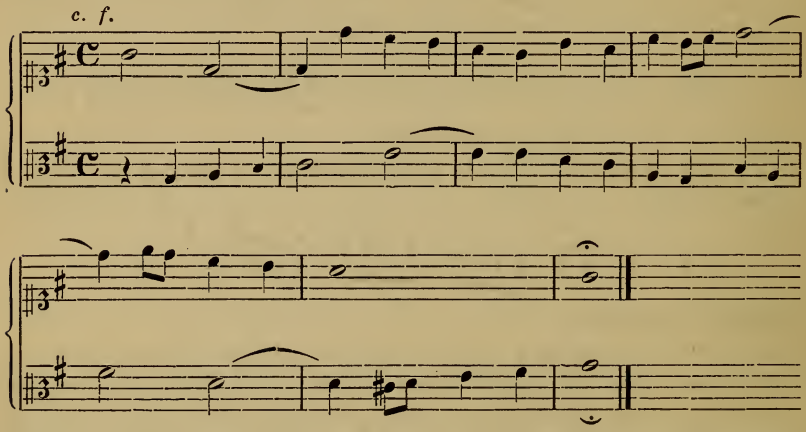
whose character may now be briefly described, taking as illustration the following musical phrase:

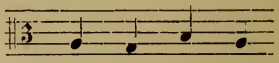


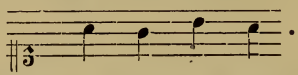
It will be noticed, that each measure differs, in melodic and rhythmic character, from the others. The entire phrase may be called a theme, or subject; and each of the shorter, rhythmically or melodically characteristic subdivisions of this subject is called a *motive*.* For the sake of a

* These motives are not to be confounded with the "leading-motives" in WAGNER'S musical dramas, which frequently bear a greater resemblance to *themes* than to the short motives with which we at present have to deal.

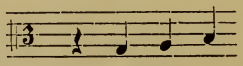
sharp distinction we will name any such short phrase, or motive, when repeated in the same part, a *repetition*; and when repeated in another part, an *imitation,* or answer.

A *strict* imitation of any subject or motive consists in repeating the same, note for note and interval for interval, in another part; and this imitation may take place in the same direction as the original motive, either ascending or descending, or in the reverse direction. Such a strict imitation may occasionally come quite easily and naturally in the following exercises; *e. g.* in this example:

the second part brings, in the fourth measure:

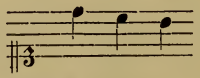


an exact imitation of the motive in the first part, third measure:

While such opportunities may, of course, be embraced, they need not be sought for at the expense of a natural and flowing style.

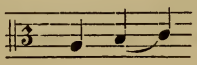
A *free* imitation of a motive resembles it mainly in its *rhythmical* character, less pains being taken to answer any given interval by another interval precisely similar. For instance,



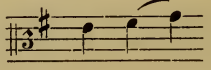
(alto, first measure), is a free imitation of



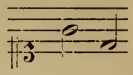
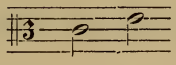
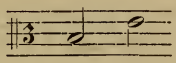
(soprano, second measure), in the reverse direction; a strict imitation in the reverse direction would be:

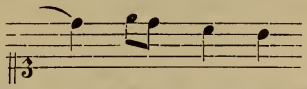


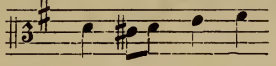
or:

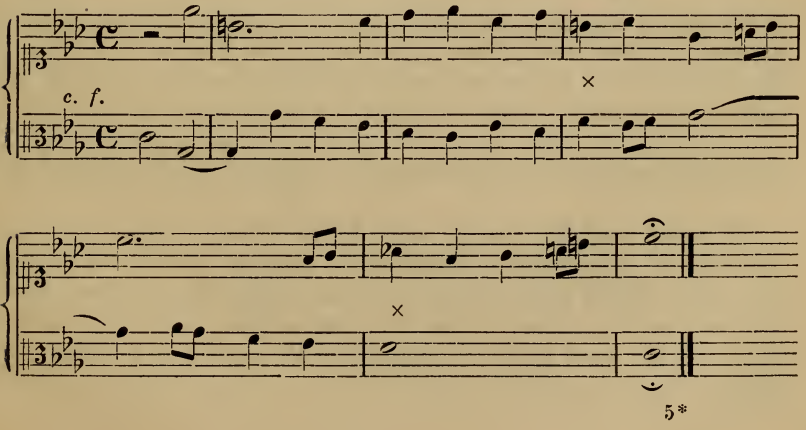


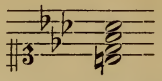
, the step of a

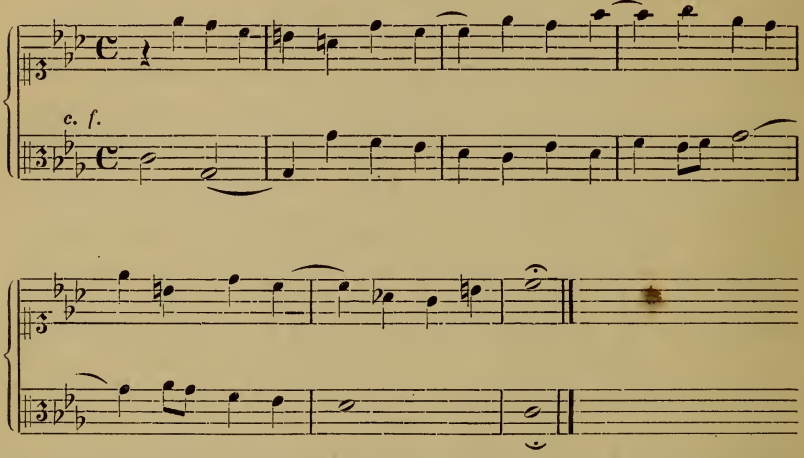
major second being answered by a major second, and the step of a minor second (marked —) by a minor second. Similarly, the motive  is answered in the alto by  ; a strict imitation would require a perfect fourth, as:  . The motive:



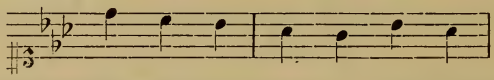
is answered by:  . The only positive restrictions placed on the leading of the counterpoint are these: (1) that all motives in it shall be taken from the *c. f.*; and (2) that in general a skip shall be answered by a skip, and a step by a step. The choice and arrangement of motives depends principally upon their position in the *c. f.*; to secure variety of rhythmical effect, notes of different duration should usually be opposed to each other. Many variations of these exercises can be made by choosing different motives in the same measures for the melody of the counterpoint; by the transposition of a major *c. f.* into minor, and *vice versa;* by arranging the motives of the counterpoint as a series of *questions* (in ascending progression), which are *answered* in the next measure of the *c. f.* by the same figure (in descending progression); by answering the *questions* of the *c. f.* in the counterpoint; or by imitating the motives entering on the first half of a measure in the one part by bringing like motives on the second half of the measure in the other part, as shown below:

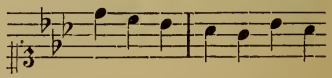


In this example the diminished fifth and its inversion, the augmented fourth, enter without preparation; this is according to the usage of the best composers, who permit any interval found in the diminished chord of the seventh:  to enter freely, even in two-part *a cappella* composition, where the melodic leading of the parts requires such free entrance. Still further variations can be written by taking one or two suitable motives of the *c. f.*, and using them exclusively in forming the counterpoint:

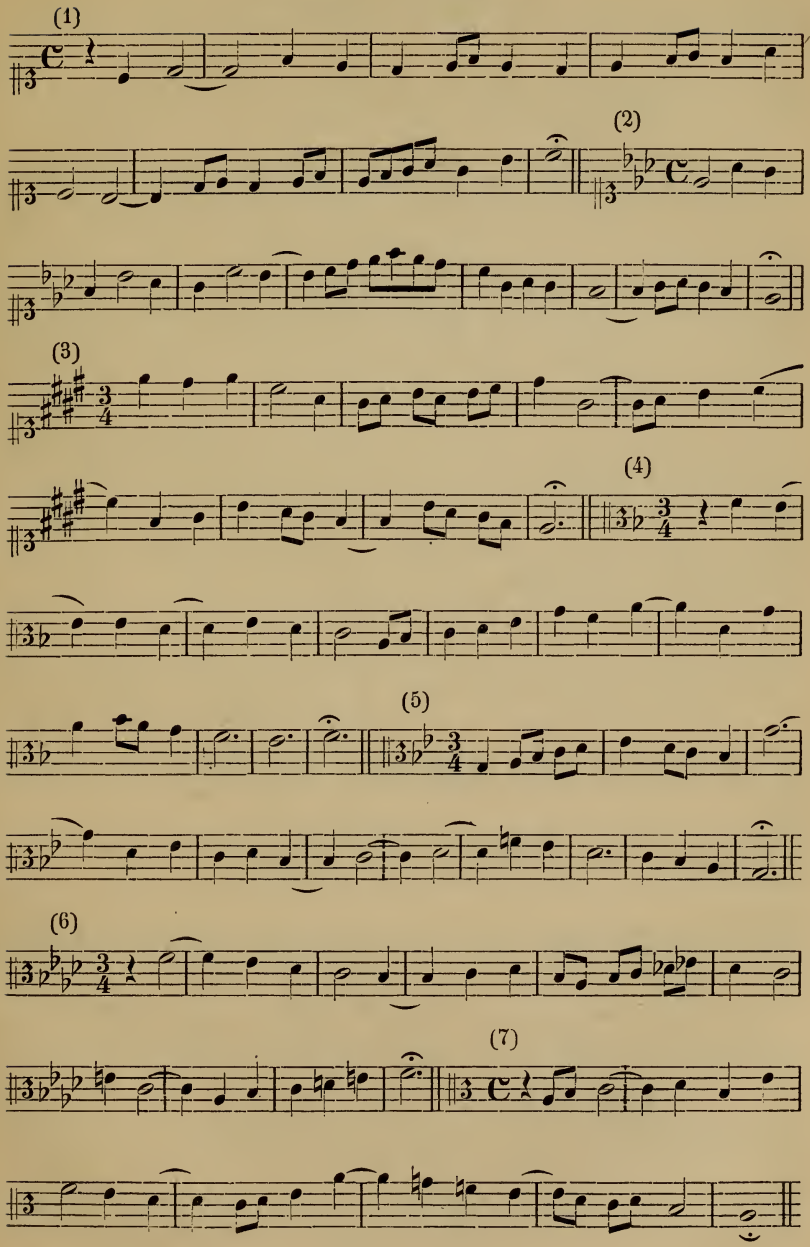


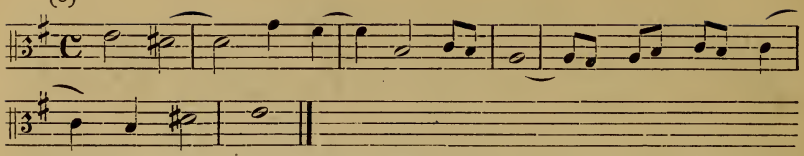
The counterpoint of this example is constructed of variations on the motive:



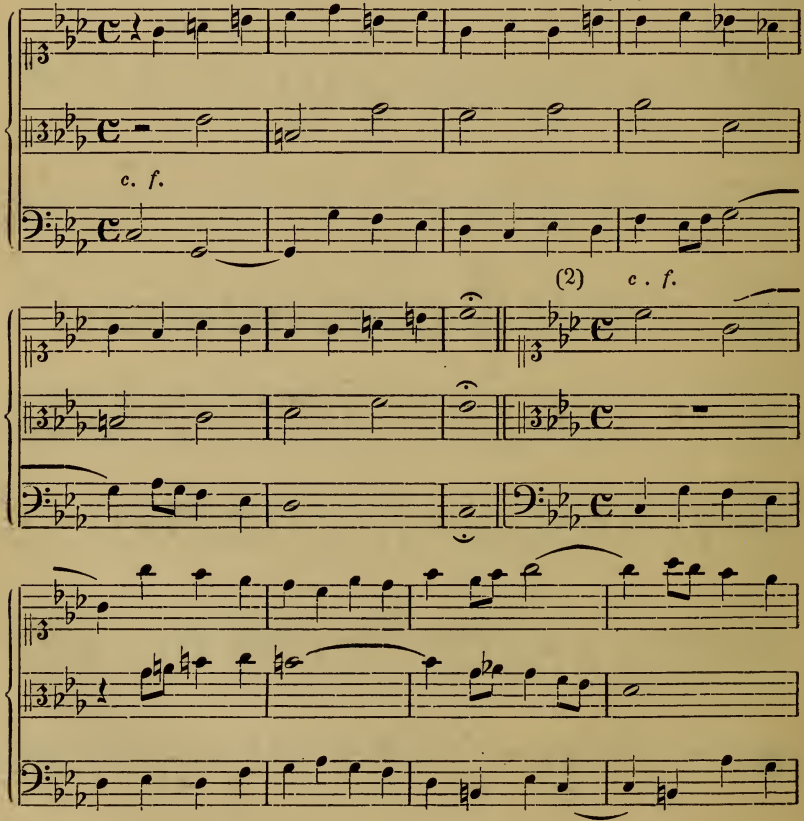
in the second and third measures of the *c. f.* Such variations must of necessity be very free in form, to accommodate them to the leading of the *c. f.* In order to prevent possible misapprehension it should be remarked, that a motive is not necessarily the figure found within the limits of any given measure; the entire phrase:  is sufficiently short and sharply defined to be termed a motive; and any rhythmically or melodically characteristic fragment of this may be used separately. There is no special technical designation for these short, *fractional* motives; it may be stated in general terms, that the longer a motive is, the more nearly it approaches the nature of a subject, or theme.

Exercises in Free Imitation.

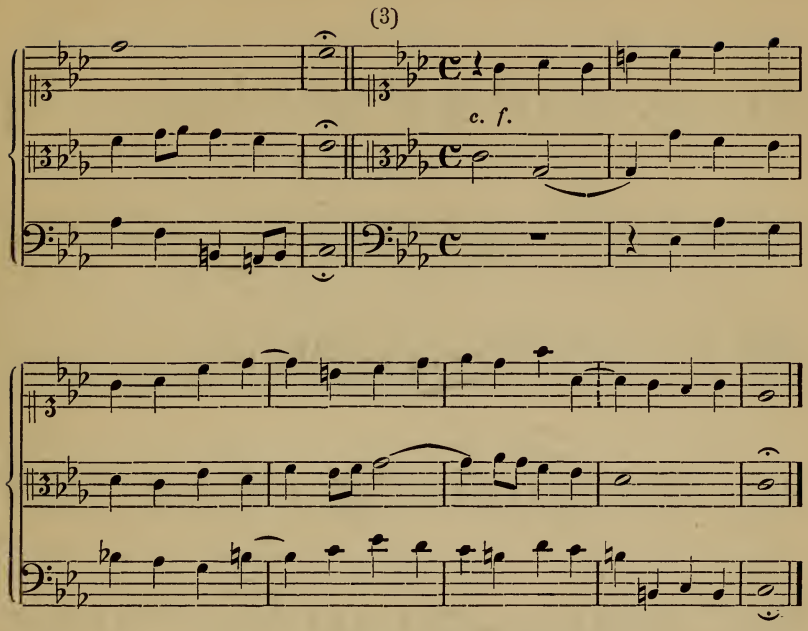


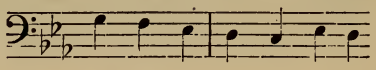
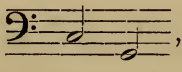
(8)

The exercises in three-part figurate counterpoint are a continuation of those just finished, special attention being paid to the variation of motives. (If any pupil should be unable to write these exercises satisfactorily, he may work them out without reference to the motives, or skip them altogether until Invertible Counterpoint has been learned.) The method of variation shown in the last example, where a single motive, with its subdivisions, is employed in forming the counterpoint, is the most interesting and instructive. Taking for example the *c. f.* already used, it is set in bass, soprano and alto successively.

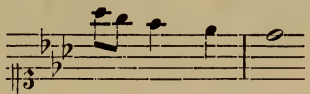
(1)

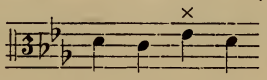


(3)

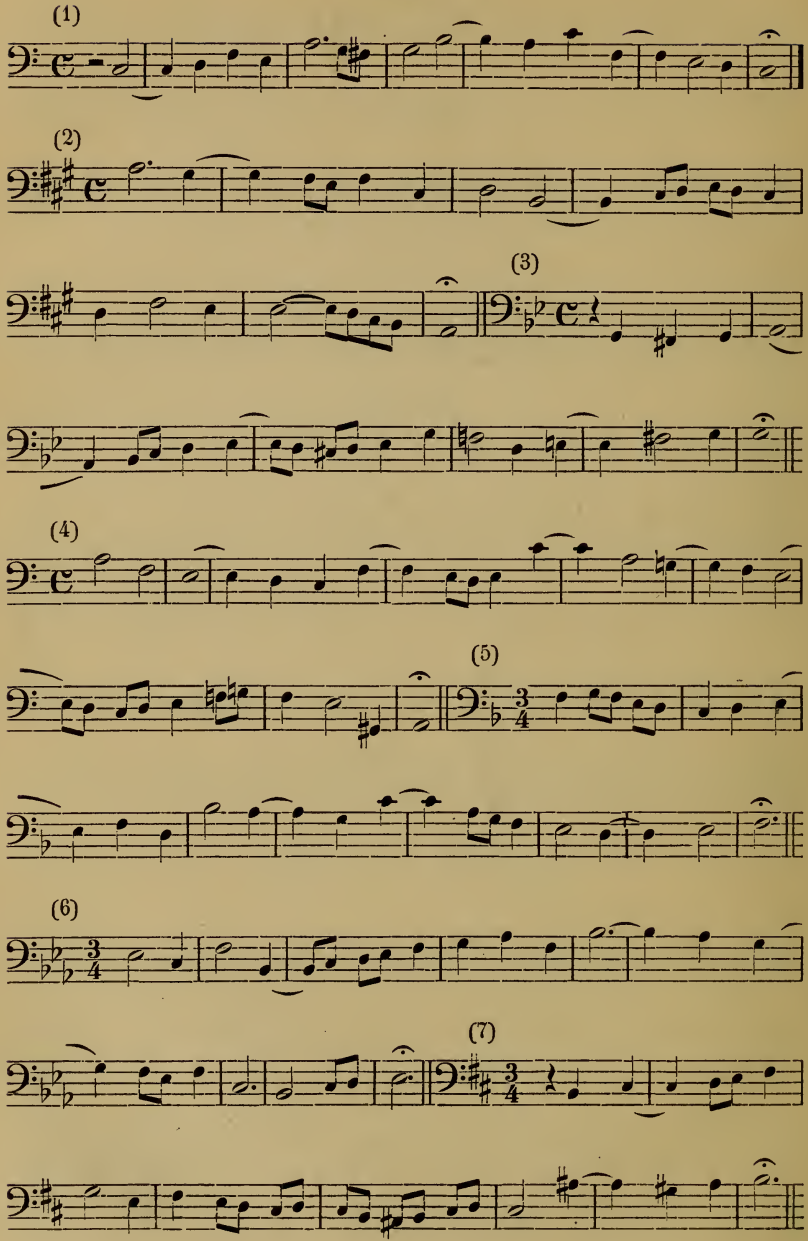


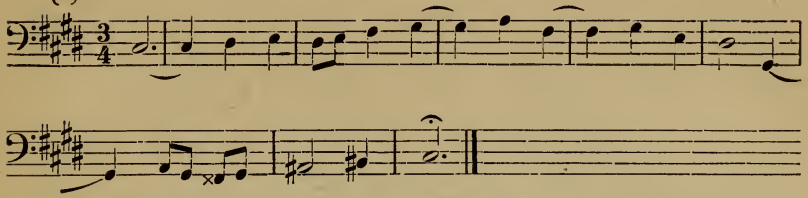
In ex. 1 the soprano has the motive:  the alto taking:  , and either part imitates the motive chosen from beginning to end of the exercise, In ex. 2 the bass takes up the motive previously varied in the soprano, the alto having:

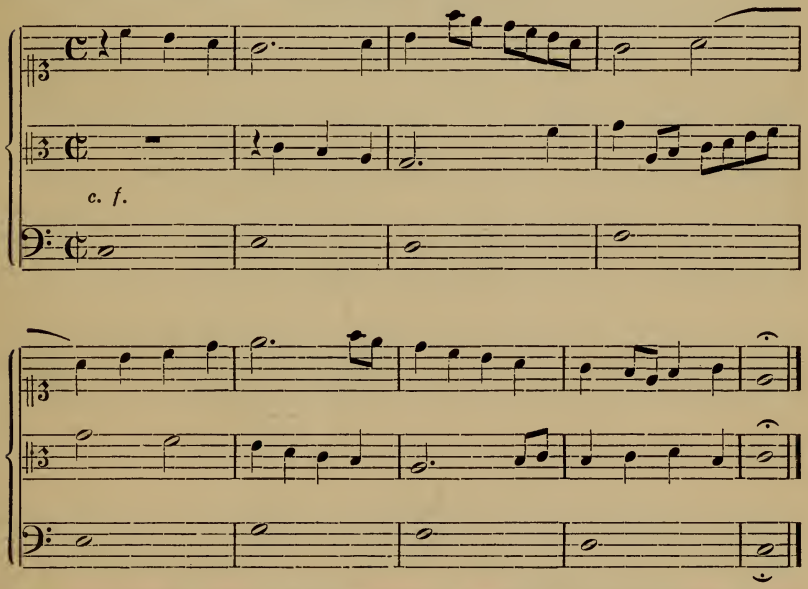


Finally, both bass and soprano take the same motive, and carry it through to the close. Here the imitations are necessarily freer than in ex. 1 and 2; but the rhythmical movement is faithfully adhered to, and the chief *melodic* characteristic of the motive, the highest (in reversion the *lowest*) tone on the second thesis:  is found in one or the other part throughout the example. This alternate taking up of a motive in the several parts, shown here in a very simple and unpretentious form, constitutes one of the principal charms of polyphonic composition, and should be diligently practised.

Exercises.



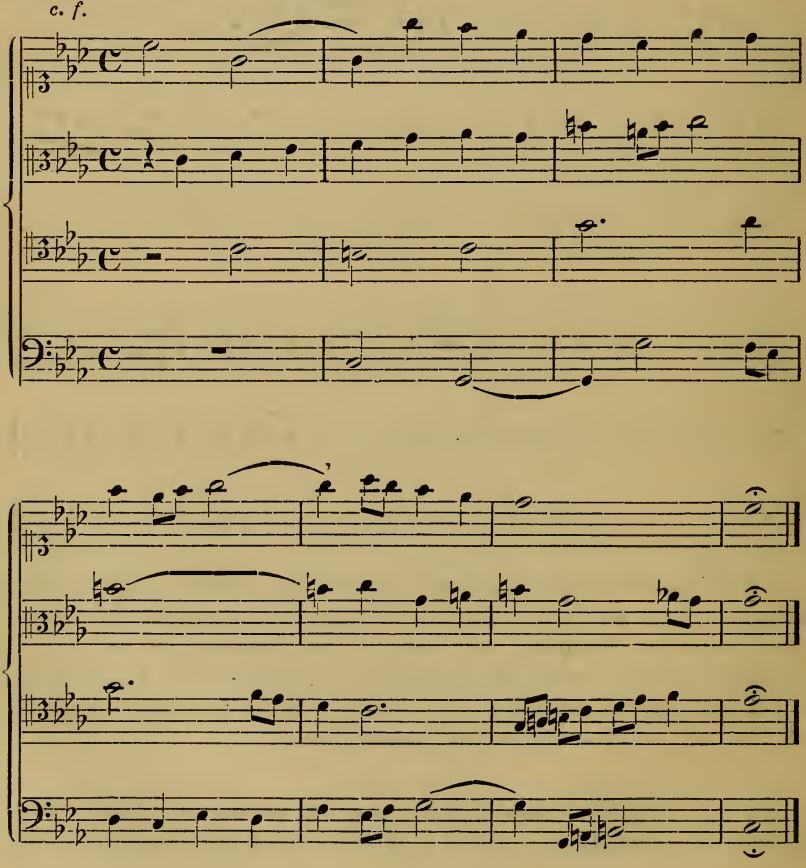
(8)

If these exercises should prove to be too difficult for any pupil, which is not likely where a fair talent is strengthened by a conscientious study of the foregoing chapters, he might select any *c. f.* in whole notes previously given and set two parts in figurate counterpoint to the same; each measure in one part of the counterpoint to be a rhythmical imitation of the preceding measure in the other part. *E. g.*



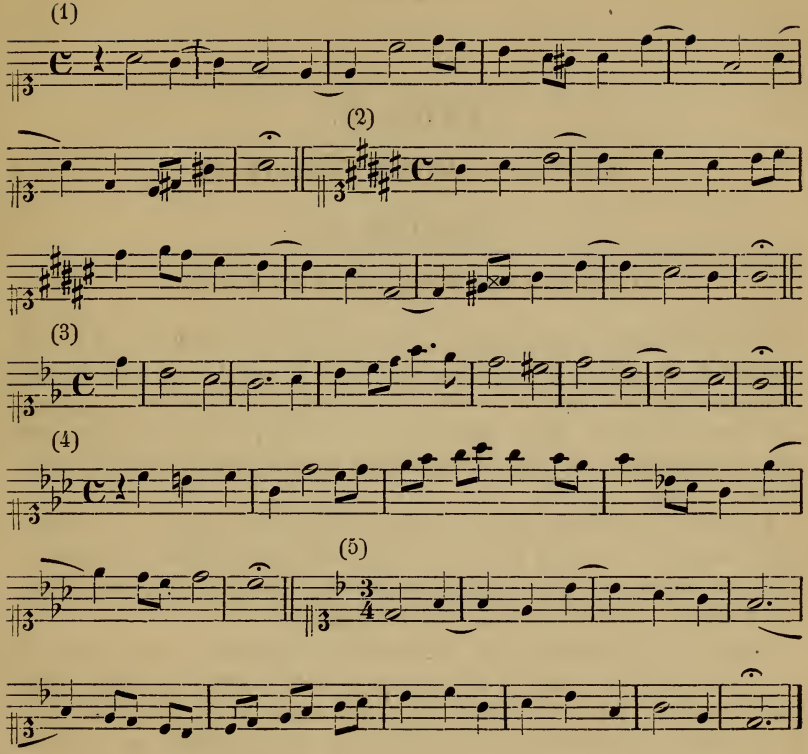
The counterpoint begins in the soprano; the alto, entering in the second measure, brings an exact rhythmical imitation of the soprano, this imitation continuing throughout the example Such exercises are easily constructed, and lead rapidly up to those just explained. The *c. f.* is to be set in each part successively. Care must be taken to secure variety of rhythm, and an agreeable melodic progression.

Four-part figurate counterpoint brings us nothing essentially new, though the difficulty of securing a free and melodious leading of the

several parts naturally increases with their number. A student who is capable of solving the exercises contained in this section, is *technically* far enough advanced to compose motets, and like church-music, after learning the principle on which invertible counterpoint in the octave is written. A close study and comparison of works of this class by leading composers will be of the greatest assistance — is, in fact, absolutely essential to success. For such composition a mastery of the strict form of the canon and fugue is not necessary, although highly beneficial; many effective movements begin with a short phrase in one part, which is taken up successively by the others, and imitated more or less exactly through only a few measures, this phrase, or motives taken from the same, appearing at intervals when the words belonging to it are repeated. In other movements no imitation is attempted, the desired effect being attained by appropriate melodic and harmonic combinations.



Exercises.



PART II.

Invertible or Double Counterpoint.

CHAPTER VI.

Invertible Counterpoint of the Octave.

This subdivision of the science of counterpoint was defined, in the Introduction, as the art of combining two or more melodies or parts in such a manner that they may be *inverted*, (*i. e.* change their relative positions, the lower being set above the higher or the higher below the lower), without infringing, in their simultaneous progression, upon the laws of strict harmony.

The term "Invertible Counterpoint" is much less vague and indefinite than "Double C.", which latter does not in the least define the subject in hand, or convey any clear meaning whatever. The former term will therefore be used exclusively in the following pages.

There are seven species of invertible counterpoint, corresponding to the seven intervals found in the diatonic scale, in either of which intervals inversion may take place under the rules to be given hereafter. From these intervals the counterpoint also takes its name; we therefore have invertible counterpoint of the second (ninth), third (tenth), fourth (eleventh), fifth (twelfth), sixth (thirteenth) seventh (fourteenth), and octave (fifteenth or double-octave). Of these seven that of the octave is the least complicated in conception and execution, and consequently the most serviceable; those of the tenth and twelfth stand next to this in practical value. The employment of the others requires so much subtle calculation as to render them practically almost, if not quite, worthless.

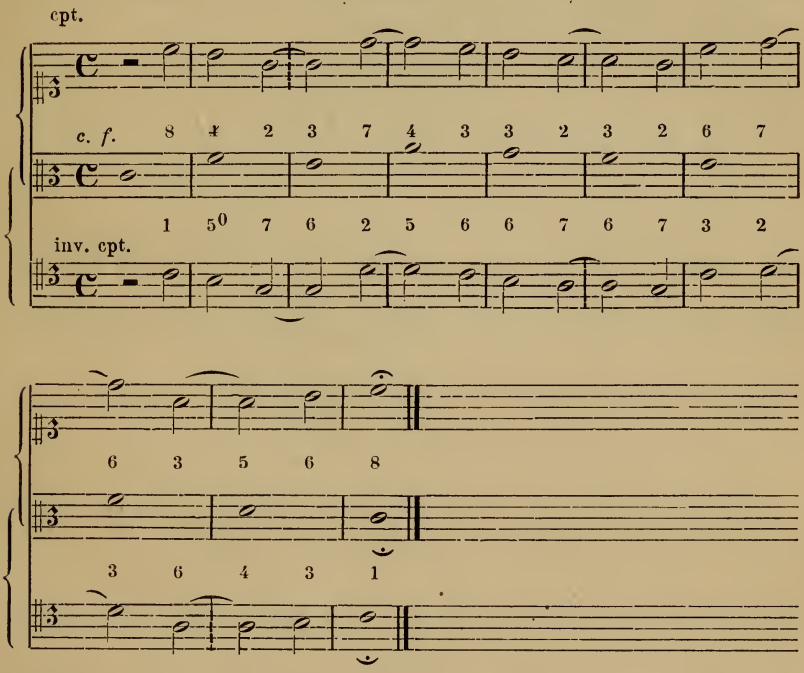
We begin with

Invertible Counterpoint of the Octave.

With the inversion of simple intervals in the octave we are already acquainted; it consists in setting the lower tone of the interval an octave higher, or the higher tone an octave lower. The result of such inversion of any interval is exhibited approximately by the following formula:

$\begin{matrix}1&2&3&4&5&6&7&8\\8&7&6&5&4&3&2&1\end{matrix}$. We say *approximately;* because by this inversion, as

will be remembered, major intervals become minor, and *vice versa;* augmented intervals become diminished, and *vice versa.* An inversion of two melodies, therefore, not only makes one or the other more prominent, but changes the character of the composition not inconsiderably; not only renders a musical thought or theme more vivid, but expresses it in a different way. In the formula the upper row of figures indicates the original intervals, and the lower row their inversions in the octave. For instance, if we take any *c. f.*, and set a counterpoint to the same:



marking the intervals which the notes of the counterpoint form with those of the *c. f.;* and then invert the counterpoint by an octave, as shown above, it will be immediately perceived that each interval between the *inverted* counterpoint and the *c. f.* is the exact inversion of the opposing interval between the *original* counterpoint and the *c. f.*, the inversion in every case corresponding to that shown in the formula.

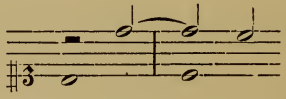
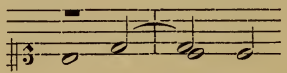
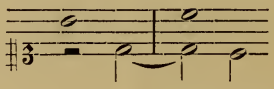
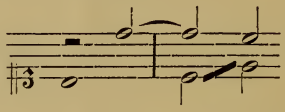
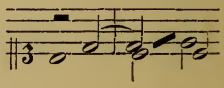
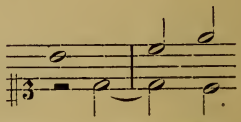
Inversion in the octave may be performed, according to circumstances, in either of the following modes.

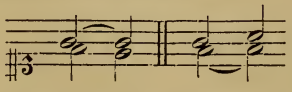
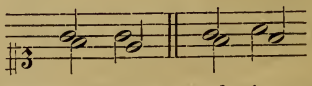
(1) The higher part may be set an octave lower.

(2) The lower part may be set an octave higher.

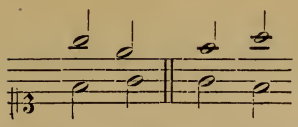
(3) Both parts may be inverted.

The first two modes will secure a good harmonic progression whenever the width of the intervals to be inverted does not exceed an octave. When the intervals between *c. f.* and counterpoint are wider than an octave, the third mode may be employed, to prevent the parts from crossing, and also to obtain a true inversion (*e. g.*, a tenth is harmonically equal to a third, consequently the transposition of the higher tone to its lower octave would not actually invert the interval); or either part may be inverted by two octaves, care of course being taken that the compass of any voice to which the part is given is not overstepped in such inversions; this can be avoided by judicious transposition of key.

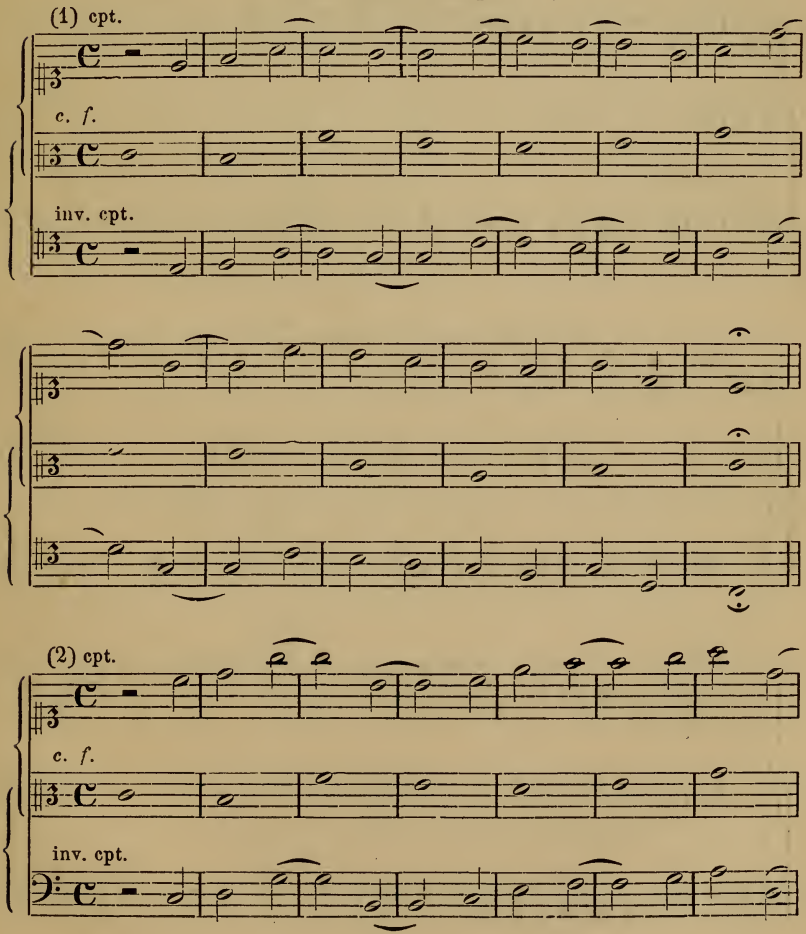
In two-part invertible counterpoint of the octave neither the perfect fourth nor perfect fifth should enter without preparation. The ninth should not occur as a suspension resolved to the octave of the fundamental *and sounding together with the latter:*  when only one part is to be inverted by an octave, such an inversion giving the following progression:  ; where *both* parts are inverted the effect is better:  . The following resolution of a suspended ninth: is not open to this objection, its resolutions on inversion being: (1)  [= resolution of a second by substitution] and: (2)  [= resolution of seventh by substitution]. In general it may be stated that every resolution of a seventh or ninth *by substitution* gives a good leading on inversion even if the parts cross; for it is immaterial whether a second be resolved so:

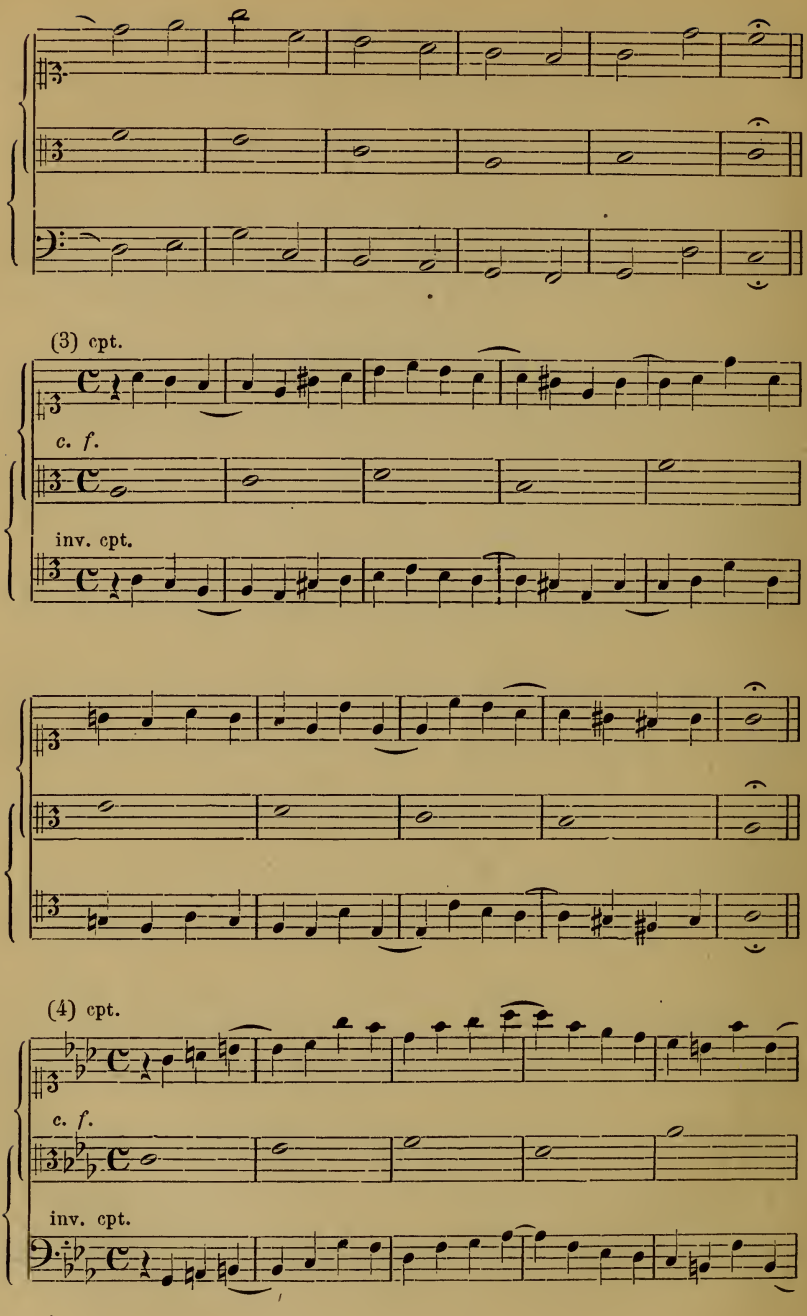
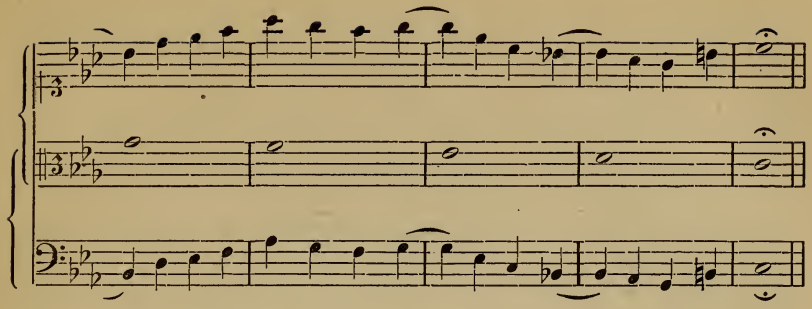
 or so:  ;

and these last resolutions of the second by substitution are the inversions

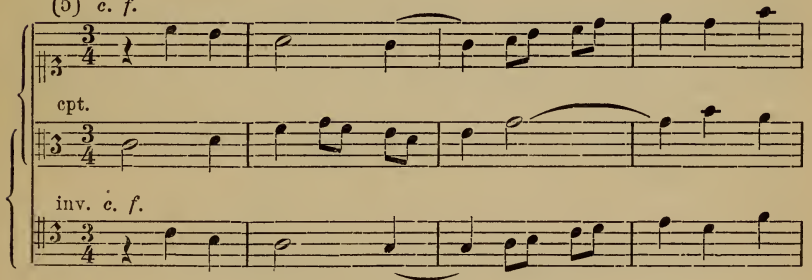
of the following:  which are the resolutions of a ninth and seventh by substitution. The regular resolution of the major seventh to the octave of, and sounding together with, its fundamental, either from a suspension or otherwise, is best avoided. With quarter-notes in the counterpoint against whole notes in the *c. f.*, or in quick time, the same rules are to be observed in invertible counterpoint as were given for simple counterpoint, with the above-mentioned special restrictions.

Six Model Examples.

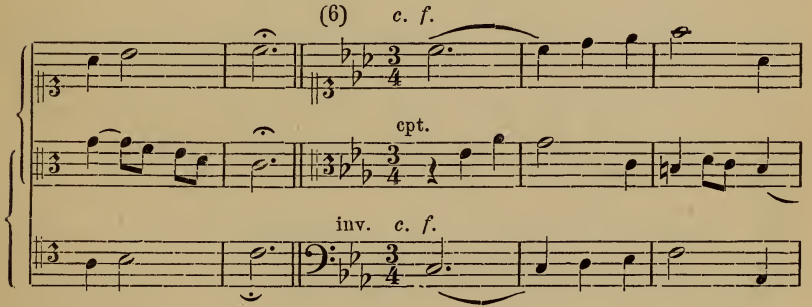
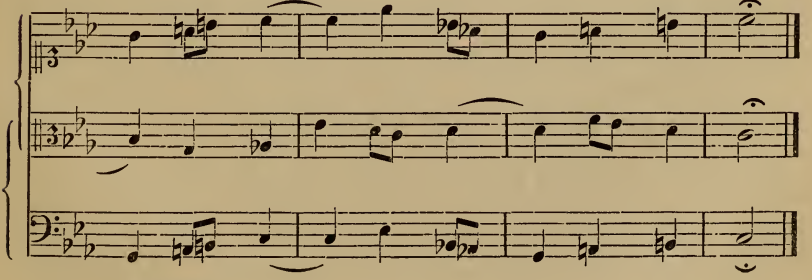



(3) cpt.
c. f.
inv. cpt.
(4) cpt.
c. f.
inv. cpt.

(5) *c. f.*

cpt.

inv. *c. f.*

(6) *c. f.*

cpt.

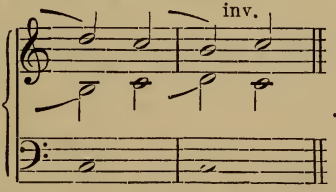
inv. *c. f.*



In working out the exercises time and space are saved by using three staves, as shown in the examples; the two upper staves contain the *c. f.* and original counterpoint, the lowest staff being reserved for the inverted part. It naturally makes no difference in the quality of the intervals whether the counterpoint or the *c. f.* be inverted. Both methods should be employed for the sake of practice in writing the exercises, which should first be worked out in close position, so that only one part needs to be inverted by an octave; and then (at least partially) in open position, which necessitates (to prevent crossing) an inversion of one part in the double-octave, or, what amounts to the same thing, an interchanging of the parts, the higher being set an octave lower, and the lower an octave higher. It does no harm if the parts cross for one or two measures; but when the crossing continues longer, or recurs frequently, it is apt to make the leading of the individual parts confused and uncertain in sound. After sufficient dexterity has been attained in writing the counterpoint in half and quarter-notes to a *c. f.* in whole notes, exercises in figurate counterpoint can be taken up. Any *c. f.* already given in simple counterpoint may be employed.

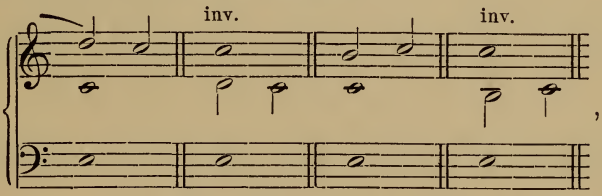
In the foregoing exercises we had a double invertible counterpoint in a two-part movement. Such a *double* invertible counterpoint (*i. e.* a counterpoint in which *two parts* are written with special reference to their invertibility or interchangeability) may also be introduced into a three or four-part movement. As long as only *two parts* are to be mutually inverted the counterpoint remains, whatever number of free parts may be set to these two, a *double* invertible counterpoint. A *triple* invertible counterpoint is one having *three* parts, all of which are so set that they can be inverted or interchanged at pleasure; and a *quadruple* invertible counterpoint is one having *four* parts so set. In the next-following examples the subject of *double* invertible counterpoint in three and four-part composition will be illustrated and explained.

There are two methods of writing a three-part exercise in double invertible counterpoint: (1) A *c. f.* is chosen, and the two parts forming the invertible counterpoint are set to it; or: (2) a two-part movement is written in invertible counterpoint, and a free part (*i. e.* a part which is not to be inverted) is added to these two. The former method being the easier, and also bearing the greater resemblance to the course of study hitherto pursued, is chosen for the first exercises. The *c. f.* is set in the bass, soprano, and alto alternately. Only one of the parts to be inverted needs at first to be written in whole notes, the other taking half-notes; or both may be written from the start in half-notes, this affording more variety and better practice with ties and suspensions. Parallel fourths,

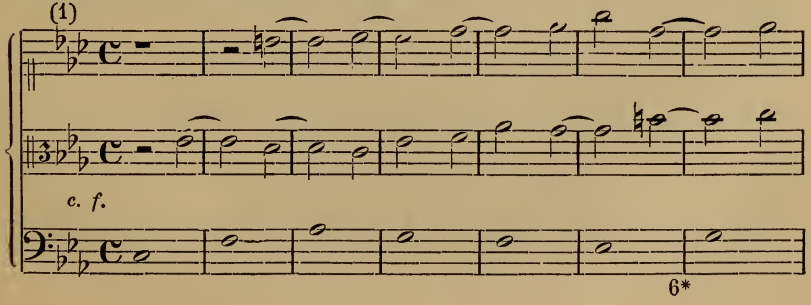
being changed by inversion to fifths, must not be written between the parts having the counterpoint; but fourths may occur between the *c. f.* and either of the other parts when the *c. f.* lies in one of the outer parts, its relation to the counterpoint then not being changed. On the other hand, when the *c. f.* is in the middle, parallel fourths can *not* be written between it and either part having the counterpoint. It is scarcely necessary to add, that parallel fourths are allowable only when accompanied by the third. The outer parts should not approach each other nearer than an octave if either of them is to be inverted, as this renders a crossing unavoidable, which is especially unpleasant when the *bass* is crossed by a higher part. [Exceptions may of course be found in fine vocal compositions; the rule is intended merely as a guide for students.] The regular resolution of the ninth and the major seventh to the octave of the fundamental, when the latter remains stationary, is always allowable when the *c. f.* is in the bass, and the seventh or ninth is formed between the bass and a higher part, *e. g.*

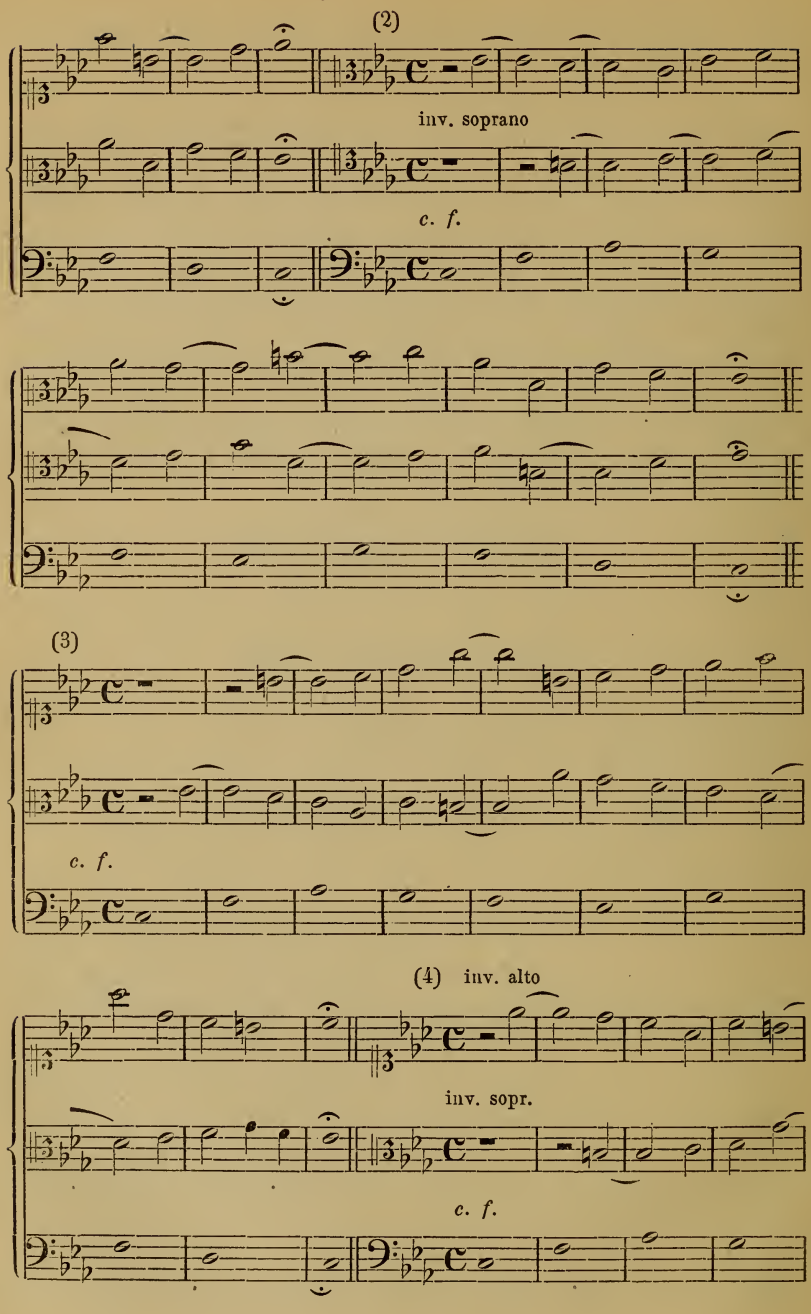


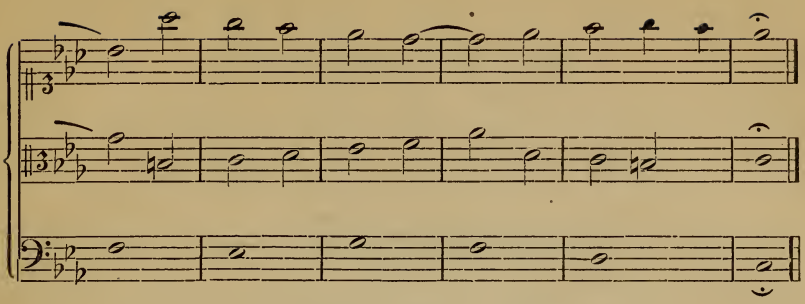
The inversion is not so pleasing when the seventh or ninth is formed between the parts having the counterpoint:



or where the *c. f.* is in the middle; but it would be pedantic to forbid such forms of resolution altogether, although their frequent introduction would produce a somewhat rough effect.




(2)
inv. soprano
c. f.
(3)
c. f.
(4) inv. alto
inv. sopr.
c. f.



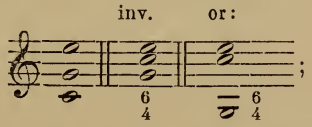
In ex. 1 the parts having the invertible counterpoint are never wider apart than an octave, and the soprano does not approach the bass by any interval less than an octave. The conjuncture of these two conditions permits us to invert the soprano alone by an octave, setting the same in the tenor, the alto retaining its original position (ex. 2.) However, it would often cramp the progression of the counterpoint to confine it within such narrow limits; the next example shows a freer and bolder leading, which necessitates an inversion of both parts having the counterpoint, the soprano being set an octave lower and the alto an octave higher (ex. 4.)

Exercises with the counterpoint in both half and quarter-notes, and the *c. f.* in the bass, should be practiced assiduously.

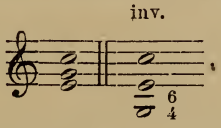
When the *c. f.* is set in the soprano or alto it becomes more difficult to harmonize the same; for in the last exercises only the *positions* of the harmonies above a fixed bass were changed, but not the harmonies themselves; whereas these harmonies, *i. e.* the *chords*, are now inverted through the inversion of the intervals.

The chord which gives most trouble *in the inversions* is that of the fourth and sixth. It is formed by inversion under the following conditions:

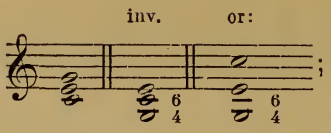
A. When the *c. f.* is in the soprano: (1) from a triad in the fundamental position with the fifth in the middle part, *e. g.*



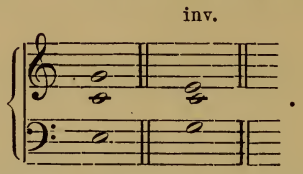
(2) from a chord of the sixth, with the fifth in the middle, *e. g.*

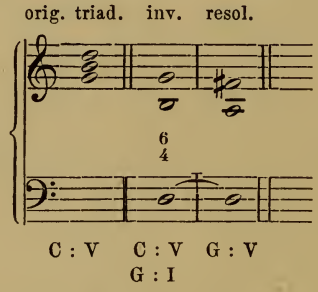


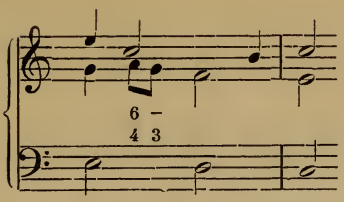
B. When the *c. f.* is in the middle: (1) from a triad in the fundamental position with the fifth in the soprano, *e. g.*



(2) from a chord of the sixth with the fifth in the soprano, *e. g.*



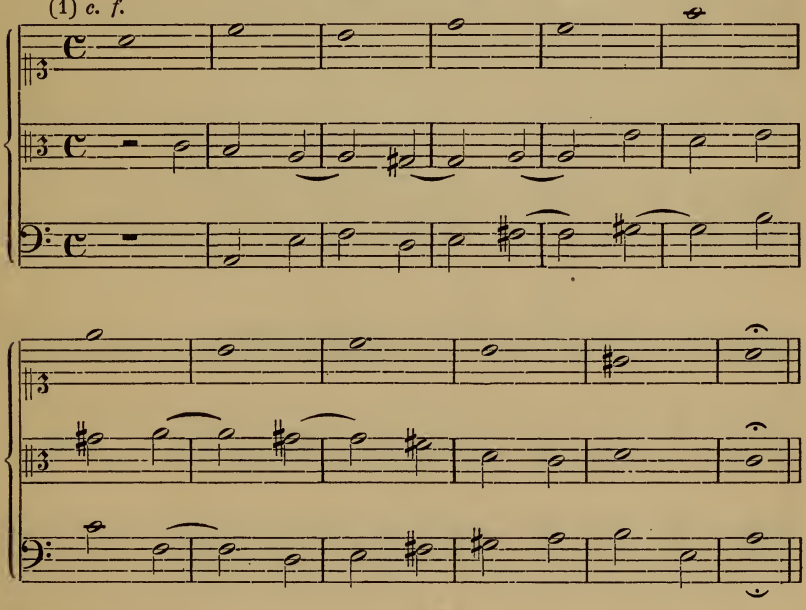
The chords of the fourth and sixth derived from the triads on the second, third, fifth and sixth degrees in major, and from the triads on the fourth, fifth and sixth degrees in minor (harmonic scale), suggest, when entering upon the thesis, a resolution to a major triad having as fundamental the fifth of the original triad. *E. g.*

In other words, these triads, when occurring as chords of the $\frac{6}{4}$, assume the character of *tonic triads;* and the most natural resolution of a tonic triad in this inversion is to its dominant triad, which resolution in each of these cases forms a modulation. If this modulation is not provided for in the counterpoint before the inversion is made which causes the formation of the chord of the fourth and sixth, the movement so inverted is very likely to produce an inharmonious and "illogical" effect. The surest and easiest way of escaping from this predicament is, to avoid writing a fifth in either of the four positions mentioned above whenever the triads just enumerated are employed. A better, because less mechanical, method is, to weigh carefully each individual case where a fifth may naturally occur under such circumstances, and then to provide, in the leading of the original counterpoint, for a correct harmonization in the inversion. But a chord of the fourth and sixth on an unaccented division of the measure, particularly where the chord is changed quickly by the introduction of a rapid

eighth-note, as:  or where the fourth is

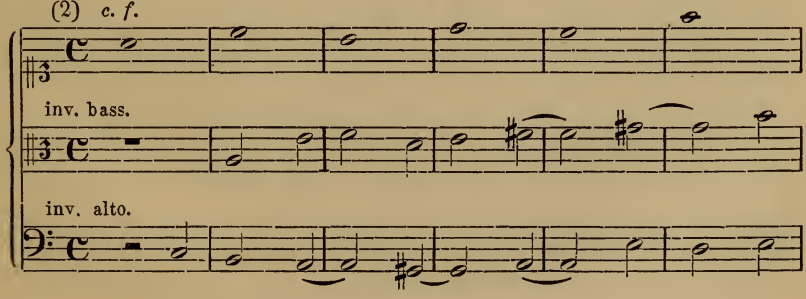
directly prepared by a tie, has not the same modulatory force as when entering free on the thesis. The practical application of the foregoing directions must be left to the musical perception and experience of the pupil himself, in the innumerable cases which may occur.

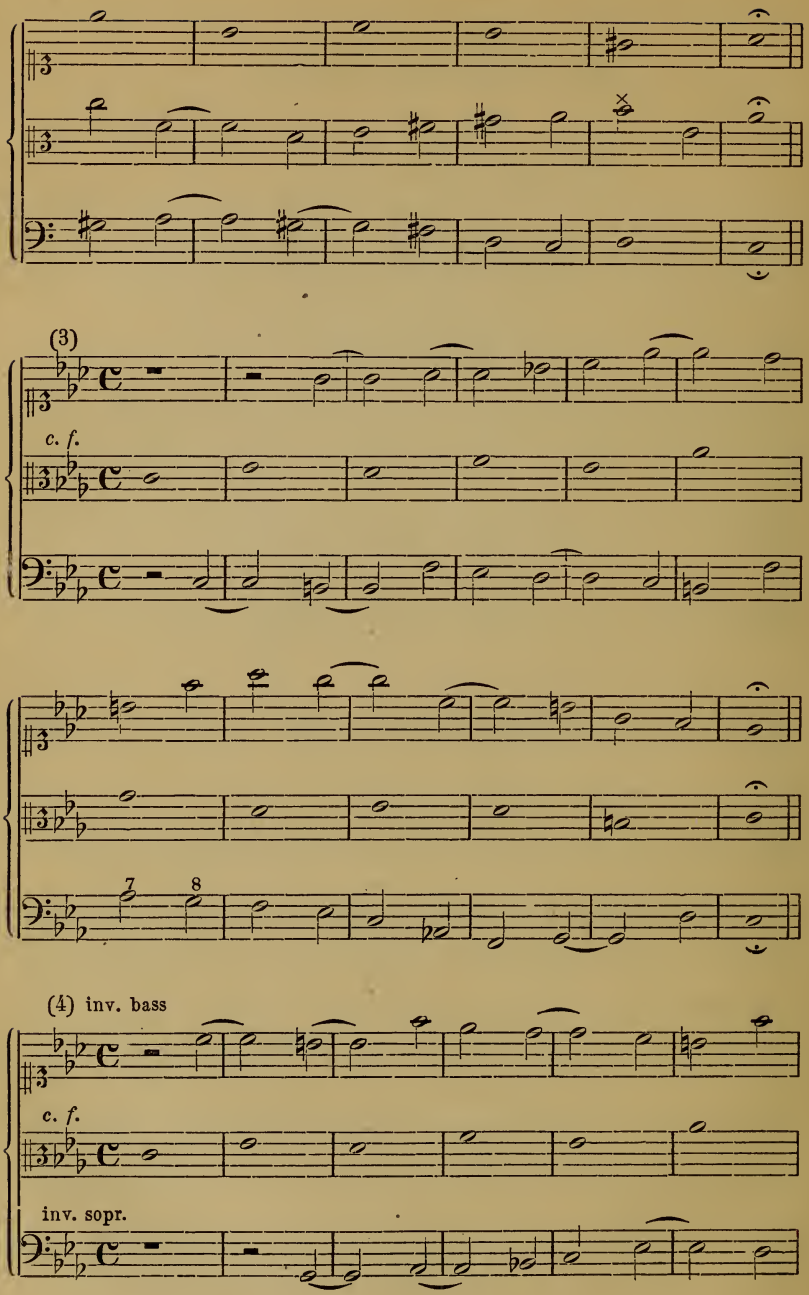
Model Examples.

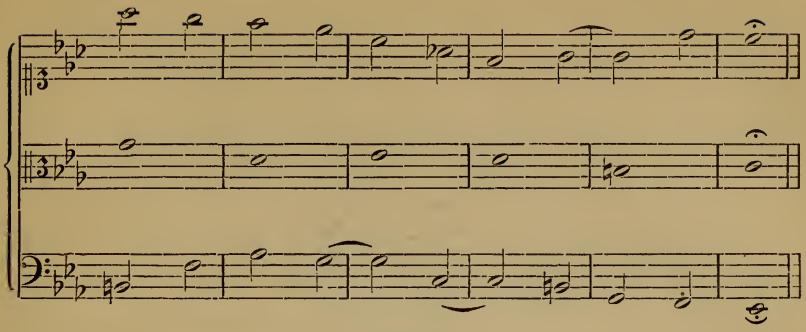
(1) *c. f.*



(2) *c. f.*

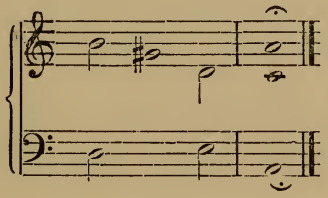



(3)
c. f.
7
8
(4) inv. bass
c. f.
inv. sopr.



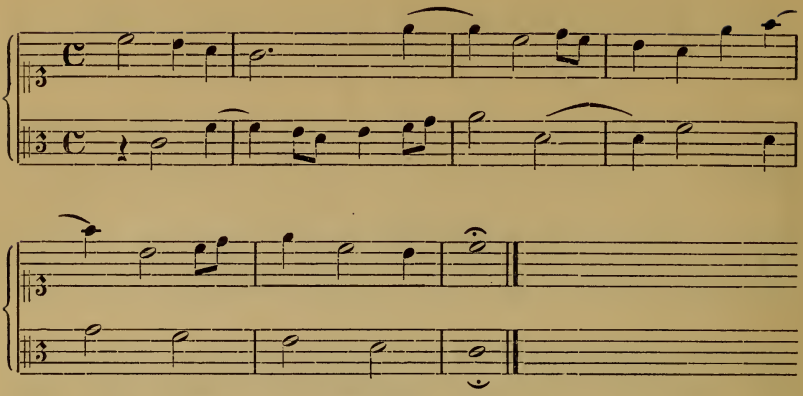
Here the counterpoint of ex. 2 and 4 is the inversion of that in ex. 1 and 3 respectively. In the last measure of 2 the inverted bass crosses the soprano, the second a'-b' being resolved by substitution; such a momentary crossing produces no ill effect, and is not incorrect. In the seventh measure of 3 the major seventh a'-g' is resolved as its inversion, the ninth g-a' might be; such resolutions of the seventh may, as before remarked, be occasionally employed.

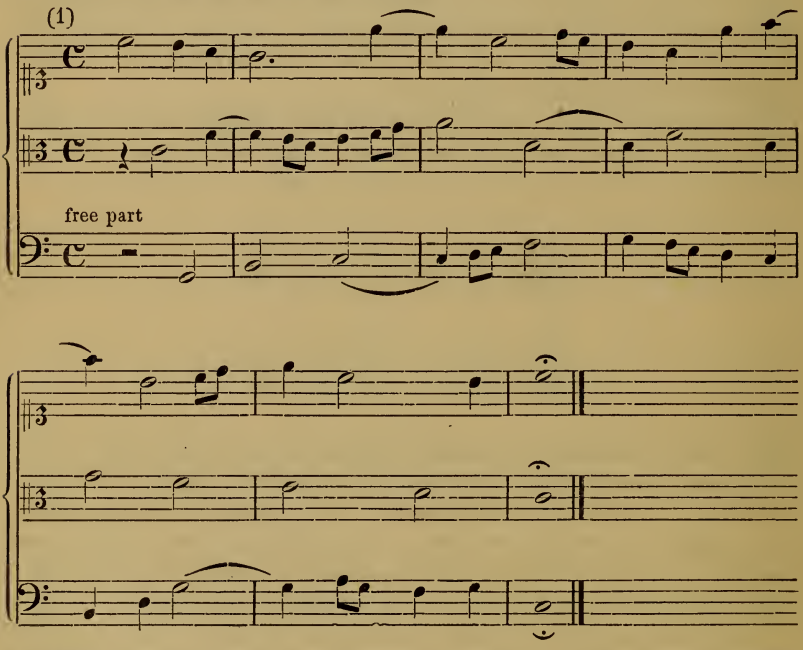
The closes of these exercises with inverted counterpoint are seldom full, and are consequently unsatisfactory. The last measure must often be changed in the inversion to obtain a full close; *e. g.* that of ex. 2:



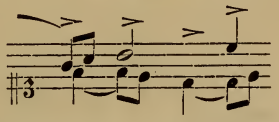
Other similar changes may be made without hesitation, the more because movements in invertible counterpoint, as practically applied, are almost invariably "adapted" to circumstances. The changes should nevertheless be as slight as possible, and the *c. f.*, as principal theme, must remain unaltered. Practice in these exercises should be continued until the principles upon which they are based are thoroughly mastered.

The second method of writing a three-part movement with double invertible counterpoint consists in setting a free (third) part to a finished exercise in two-part invertible counterpoint. In this form double invertible counterpoint is often practically employed in three or four-part composition.

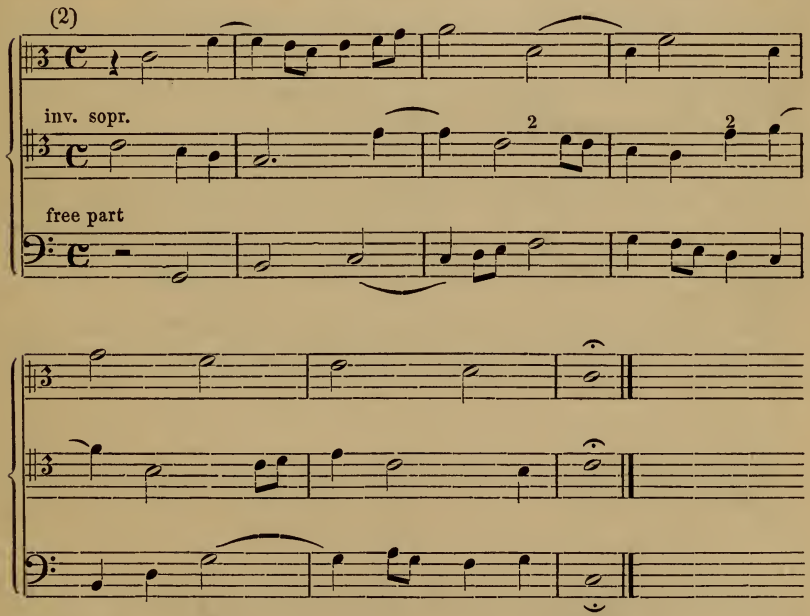
We take as example the following exercise in two-part invertible counterpoint:

and begin by setting a bass to the same:



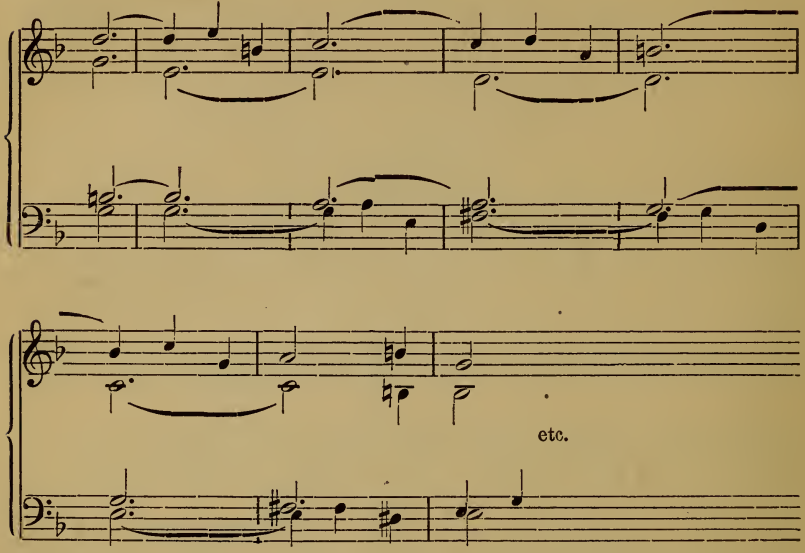
In writing this bass care must be taken on the one hand that its rhythmical character does not become too monotonous, and on the other that its melody does not slavishly follow either part having the invertible counterpoint. HAUPTMANN says on this head, that the main characteristic of double counterpoint is not its *invertibility*, but lies in the rhythmic and melodic dissimilarity of the parts; and not in the mere difference in

length of the opposing tones, but in the contrariety of thesis and arsis, that is, in *syncopation*. Here an occasional syncopation is not meant, but rather one affecting the entire relation of the opposing parts. — Without going so far as this eminent theoretician, it is safe to say that syncopation is one of the principal factors in producing a vigorous contrapuntal form, and should be frequently employed. It takes place not only when the principal (first) thesis of a measure is left unaccented, but also when any secondary thesis created by subdividing the measure is passed over. For instance, in this measure:  are found four theses, formed by the subdivision into eighth-notes; in the soprano the first and third theses are syncopated, and in the alto the second and fourth.

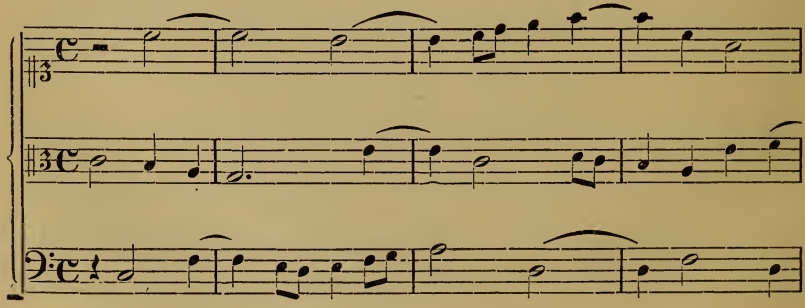
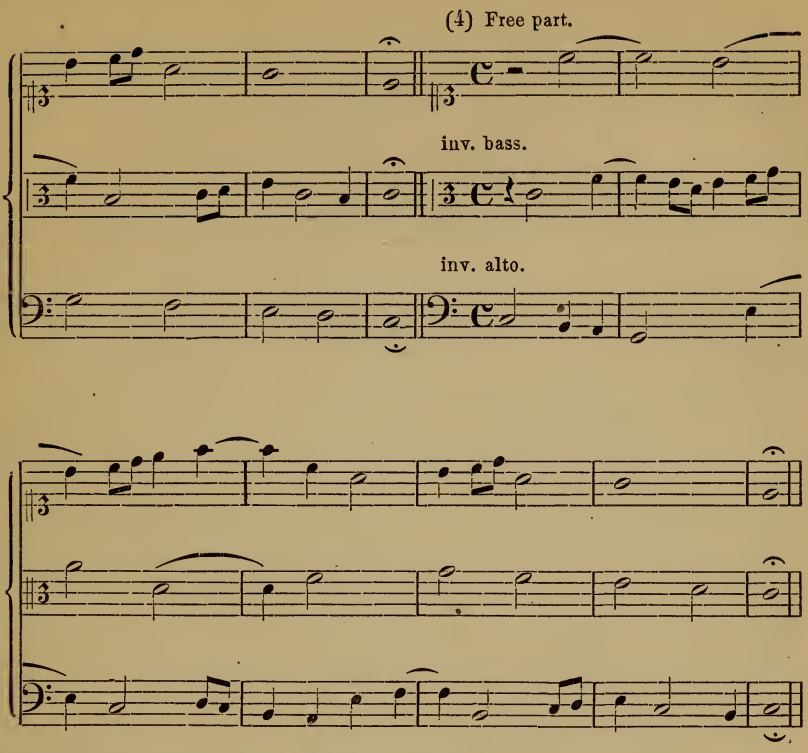
Returning to the exercises, after this short digression, that last given is repeated with the soprano set in the tenor, *i. e.* inverted by an octave:



Respecting the resolutions of the second formed between the upper parts it is necessary to explain, that such progressions have a very different effect in vocal music from that obtained on the piano. In the former case the leading of the several parts remains distinct and pleasing,

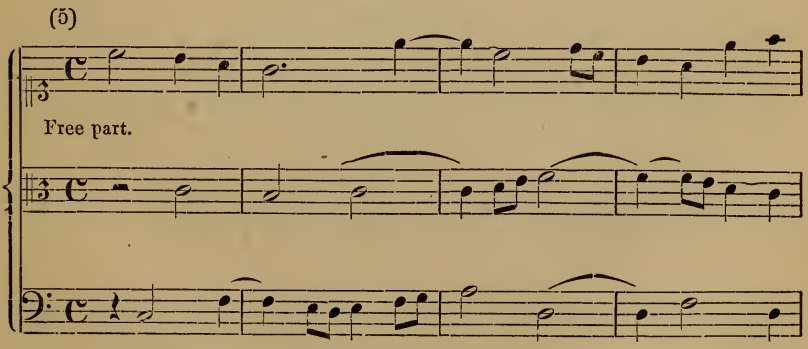
while in the latter it is apt to become confused and inharmonious. An example of resolutions of the second and seventh taken from VOLKMANN, op. 59, I, will serve as an illustration of their treatment in *a cappella* composition.

These leadings of the second and (minor) seventh are simply passing notes forming retarded resolutions. The student need not be alarmed when such forms appear in the inversions, provided that either the regular resolution or a resolution by substitution follows; the effect is not at all unpleasing.

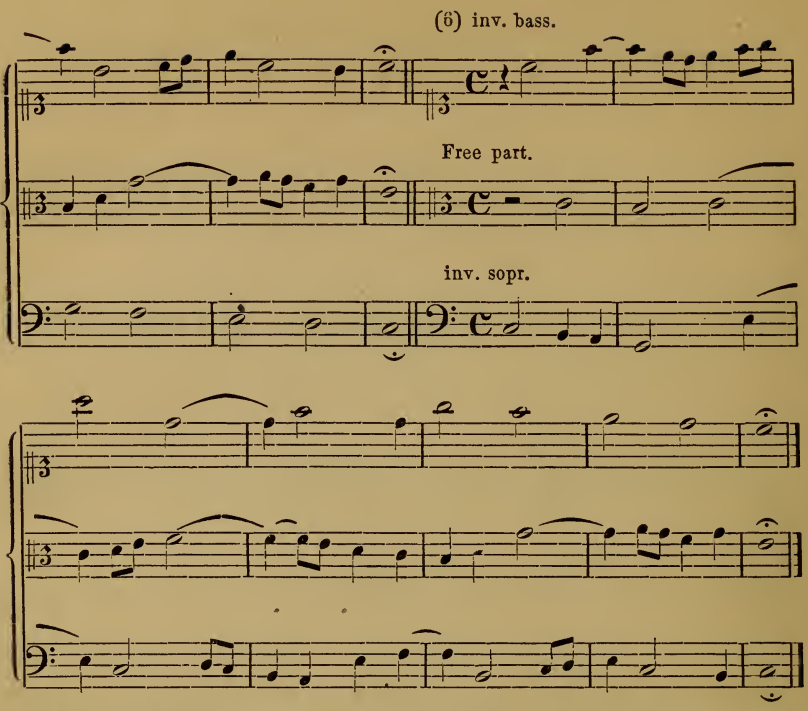
The next step is to give a free (non-invertible) part to the soprano. For this purpose the parts having the invertible counterpoint are set in the alto (or tenor) and bass, and the free part written out above them:

(3) Free part.



This exercise calls for no special remark.

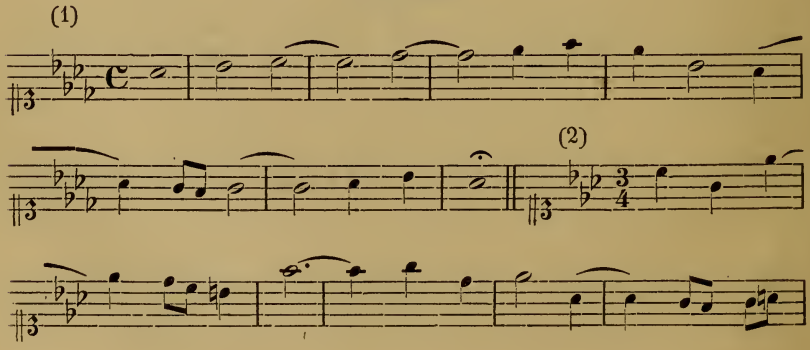
Finally, if we wish to add a *middle* part to the original counterpoint, the two parts forming this latter must be separated by a wider interval. The alto is therefore set an octave lower, as bass, between which and the soprano the free part can be written:



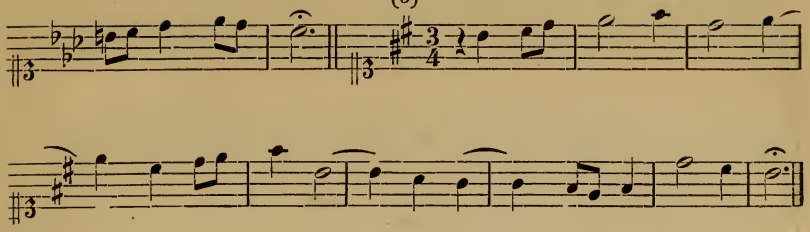


In none of these exercises should the added free part be treated as an harmonic filling; on the contrary, every effort ought to be made to secure a leading at once rhythmically independent and melodically pleasing. Through steady perseverance in this course the present exercises will prove to be an excellent preparation, not only for those succeeding them, but also for practical vocal composition.

Exercises.

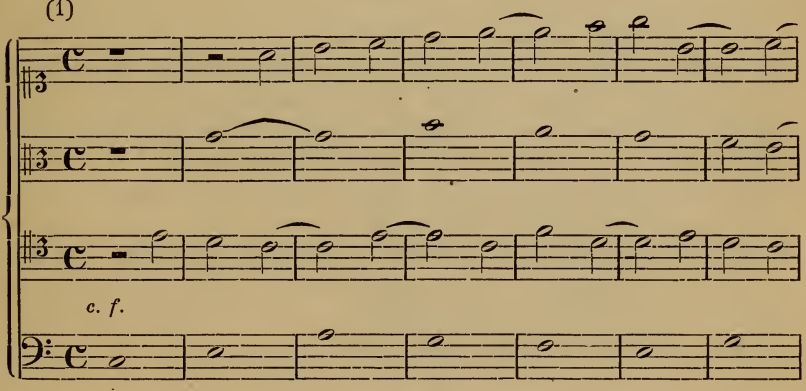


(3)

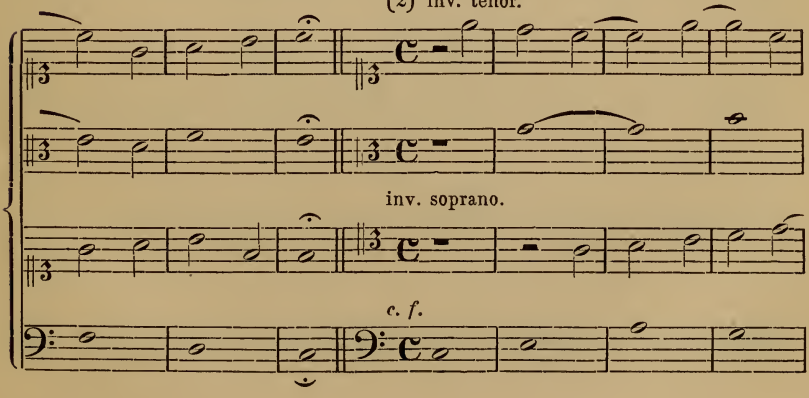


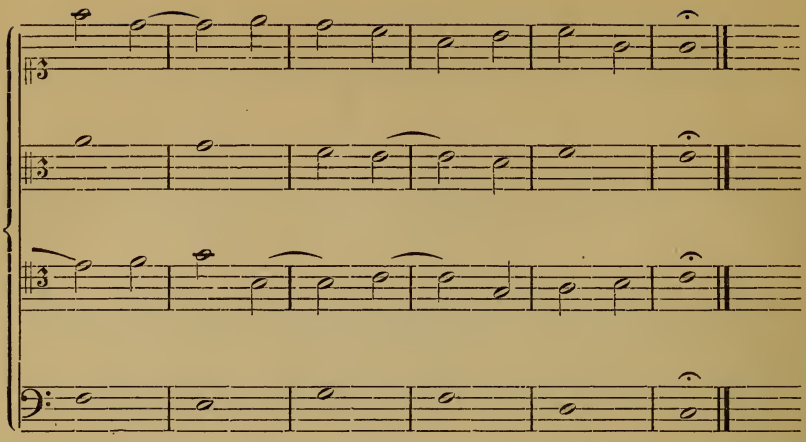
For the first exercises in four-part double invertible counterpoint a *c. f.* in whole notes is set in the bass, to which a soprano and tenor in half-notes are written in invertible counterpoint, the alto being at the same time written in whole notes without regard to its invertibility.

(1)

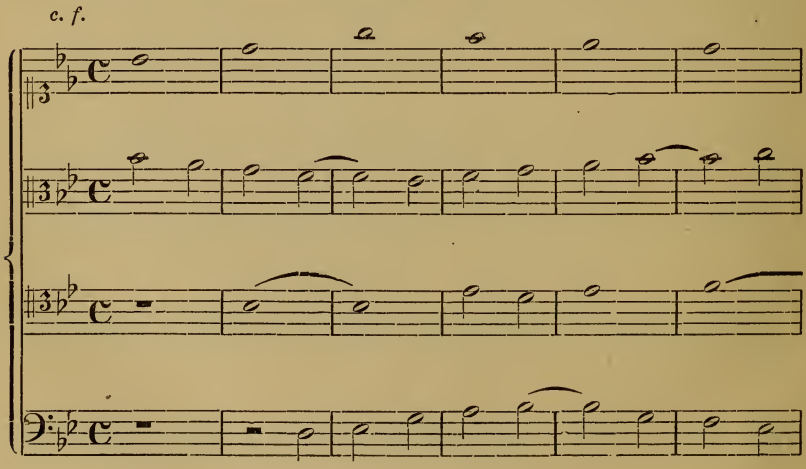


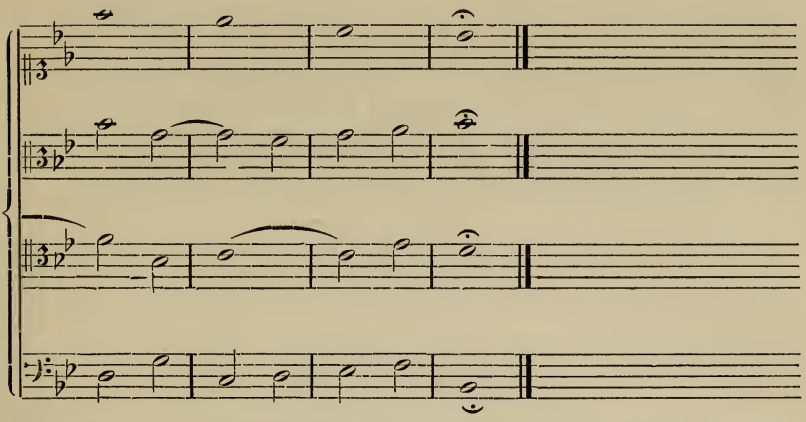
(2) inv. tenor.

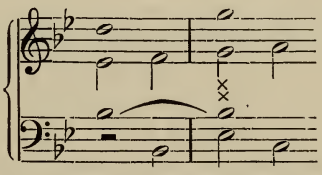


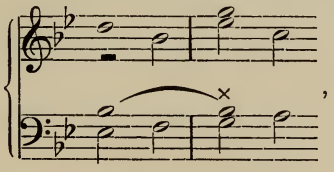


It is now neither necessary nor desirable to bind the melody of the alto strictly to whole notes where an occasional half or quarter-note secures a more flowing melodic or harmonic progression. It is plain that, wherever the bass is not inverted, no special difficulty is experienced with regard to its relation to the invertible counterpoint. The relation of this latter to the alto must, on the other hand, be the object of careful attention; parallel fourths between the alto and either part having the invertible counterpoint are particularly to be guarded against. As soon as exercises having the *c. f.* in the bass can be worked out in half and quarter-notes without too much difficulty, the *c. f.* may be set in the soprano, the exercises assuming this shape:





the student may write out the inversion of the bass and alto. Obviously, parallel fourths between alto and tenor, or bass and tenor, must not occur, because the inversion would produce parallel fifths. Also, if the fifth of a triad in the fundamental position, or as a chord of the sixth, be written in the alto, the inversion always gives a chord of the fourth and sixth [see remarks on p. 85]. Covered octaves in upward progression between soprano and alto, *e. g.*

become,

on inversion of alto to bass, covered octaves between bass and soprano:

which progression is generally undesirable.

The main object of the examples, and of the exercises supplementing them, is to enable the student to thoroughly master the *principles* upon which double invertible counterpoint in the octave is written. These principles once firmly grasped, there need be no hesitation in entering upon broader fields and more difficult tasks. The amount of practice required must be left in each individual case to the judgment of the teacher; it depends of course in no small degree upon the eagerness and intelligence of the pupil himself. After these last forms have been worked out in half

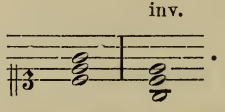
and quarter-notes, the student may, according to circumstances, continue like exercises with the *c. f.* in the middle parts, or in figurate counterpoint; or may even proceed directly to the next chapter. In no case should he content himself with mere superficial or half-knowledge of the subject; nor should the teacher insist upon a too-prolonged and therefore wearying practice with these exercises, which are, at best, dry and formal in their nature.

CHAPTER VII.

Triple and Quadruple Invertible Counterpoint of the Octave.

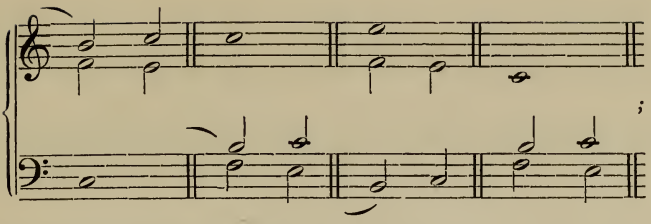
A composition in *triple* invertible counterpoint is so written, that its *three* parts can be inverted (interchanged) at pleasure, each inversion producing a new, but harmoniously pleasing, effect. It is immediately apparent that, in order to perform this feat successfully, a strict observance of all the rules previously given for writing double invertible counterpoint is essential. This chapter is therefore a review of the one preceding it; each rule for determining the correct progression of any two parts being now applied to all.

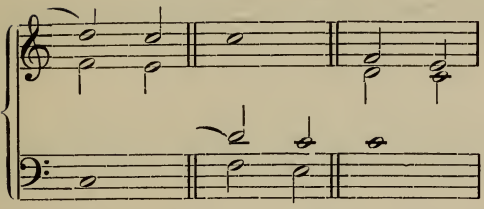
A chord of the fourth and sixth is formed whenever the fifth of a simple triad is found in the bass. Therefore, if such a triad occur either in the fundamental position or as a chord of the sixth, (particularly on the thesis), the directions given on p. 85 should be followed. It is best not to commence immediately with a full triad, this giving as second inversion

a chord of the $\frac{6}{4}$: 

Parallel fourths between any two parts are to be avoided, they becoming on inversion parallel fifths. Neither should covered octaves be written between any two parts.

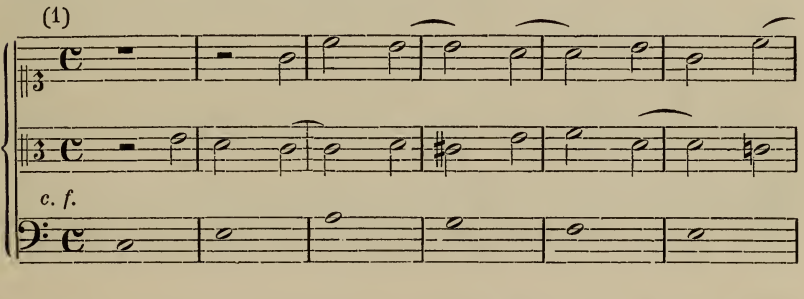
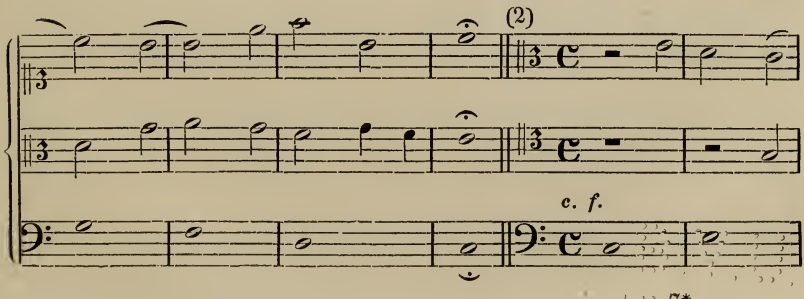
All resolutions of the second, seventh, and ninth by substitution are allowable, even where the parts cross on inversion. Suspensions of the ninth and major seventh, resolved to the octave, produce on inversion forms like these:

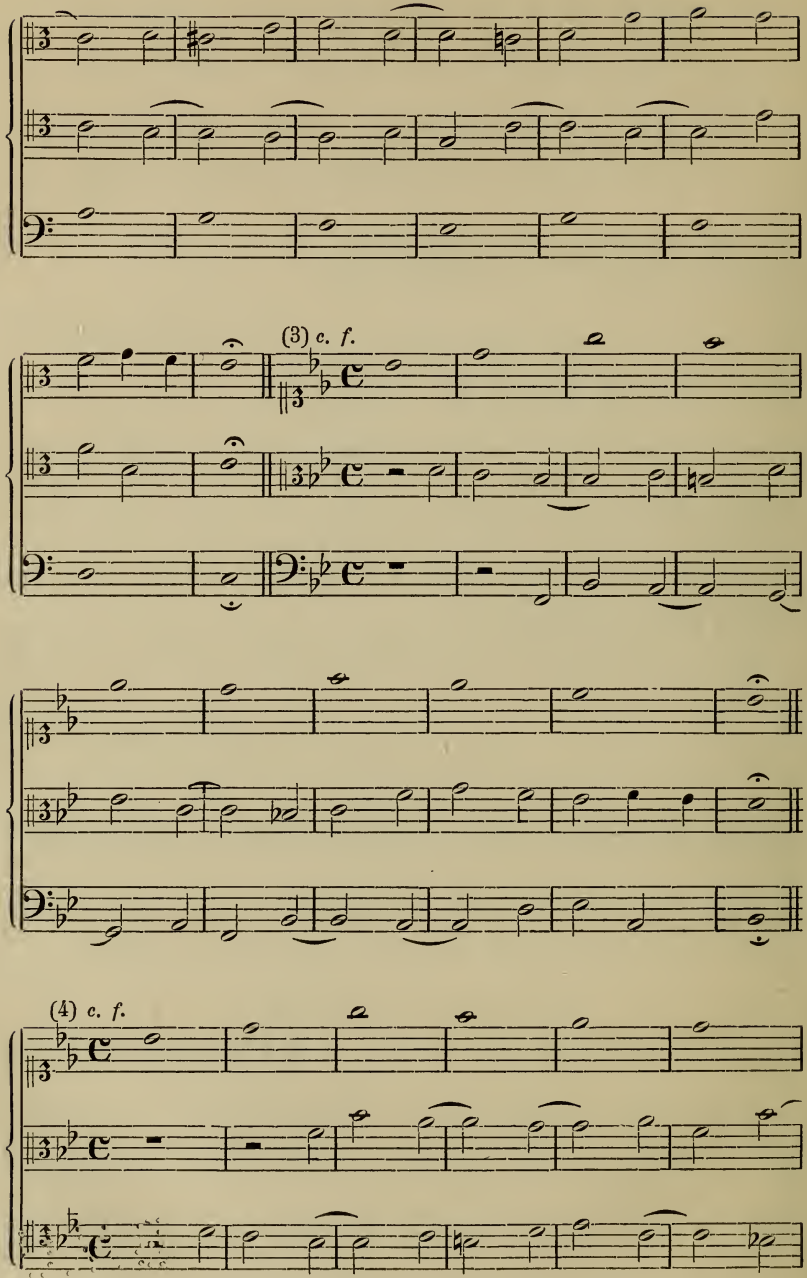


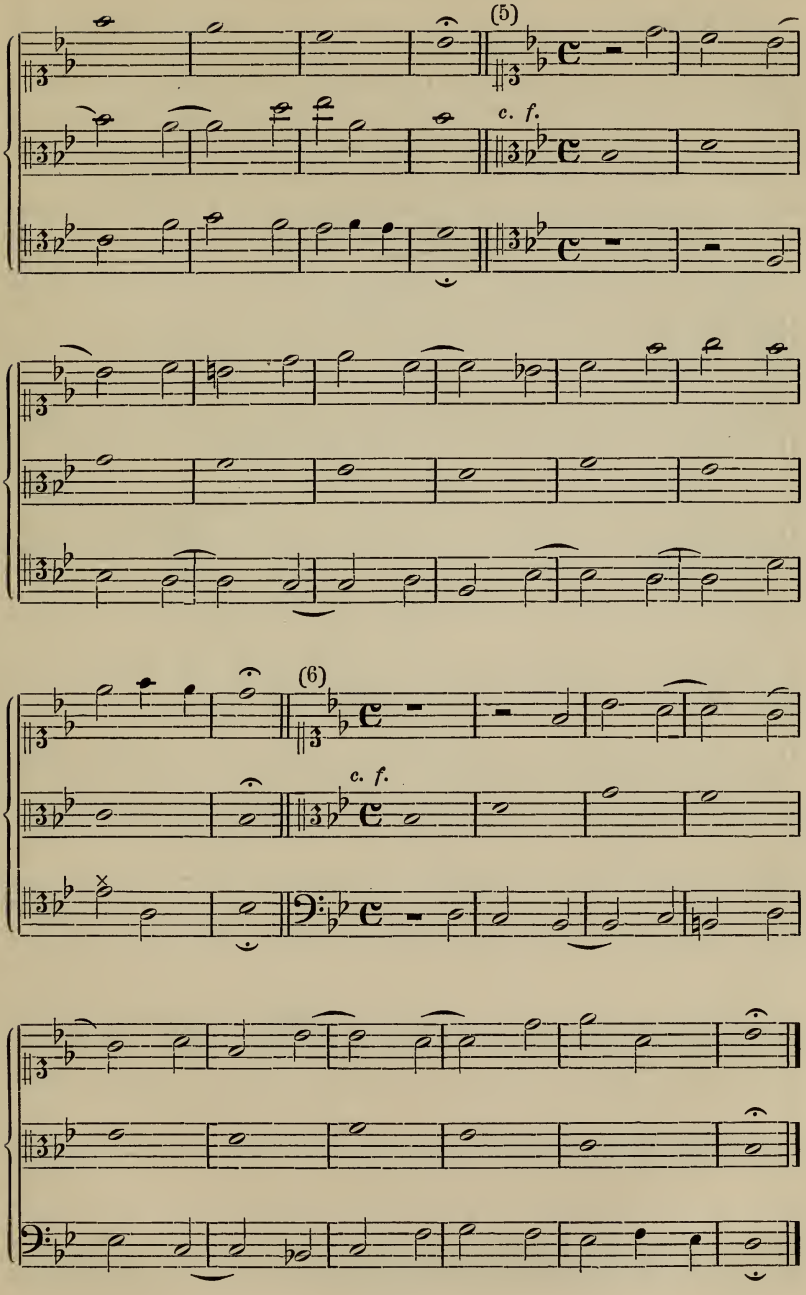


etc. As before remarked, it would be pedantic to condemn such progressions altogether [compare resolutions in example from VOLKMANN, p. 92]. An occasional crossing of the parts in some inversions is scarcely to be avoided if their leading is to have any life and variety. If the bass momentarily cross the middle part with a strongly accented tone on the thesis, the effect is not necessarily bad [ex. 5, last measure.]

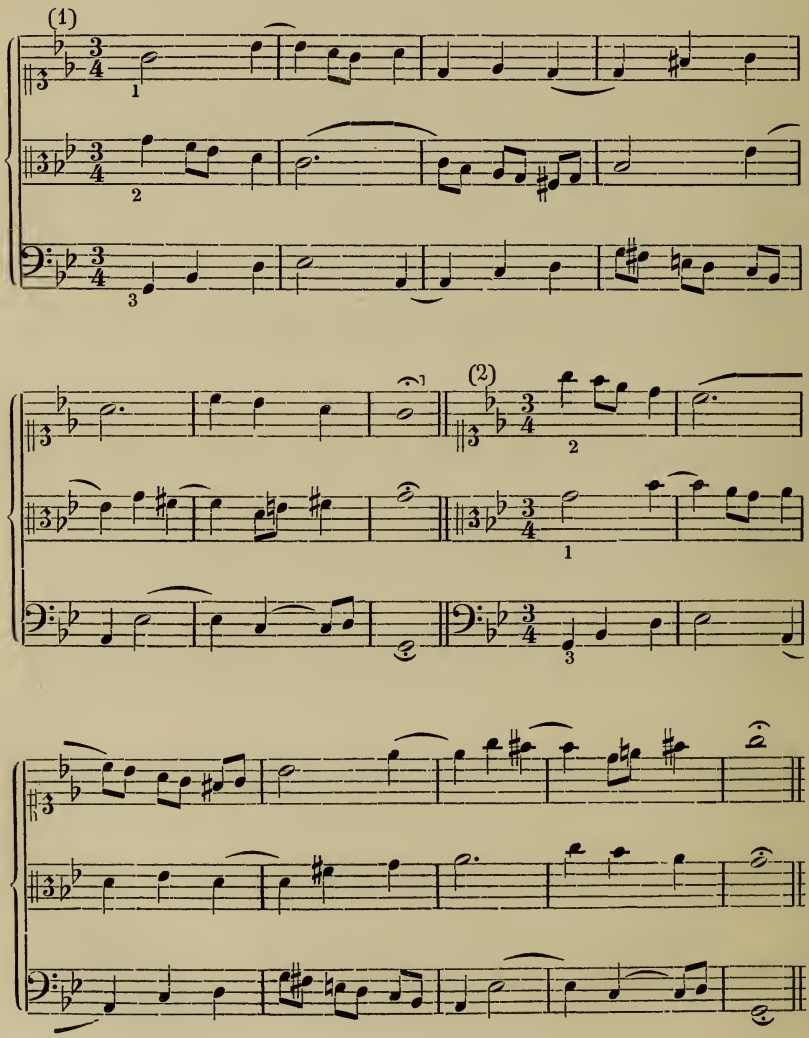
Ex. 1 is written in accordance with the above conditions; its five inversions are consequently harmonically correct.

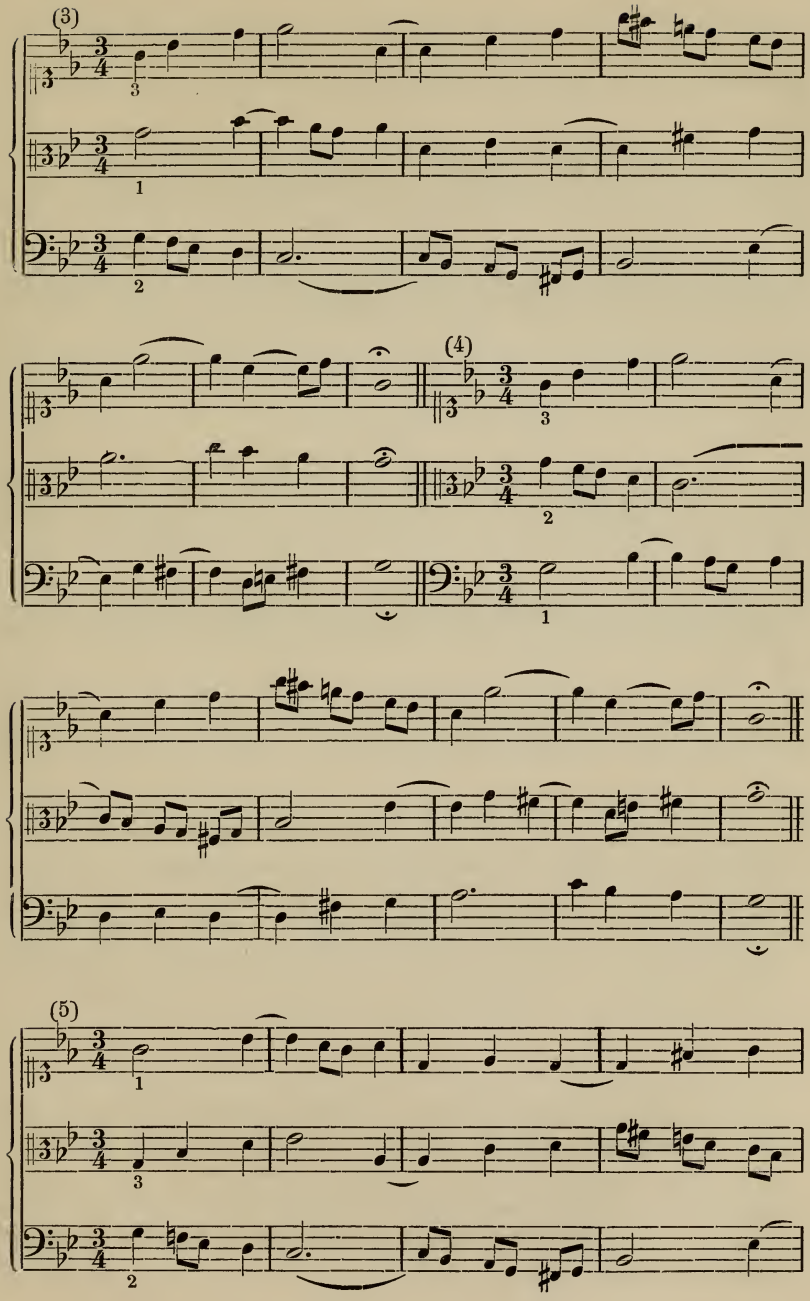


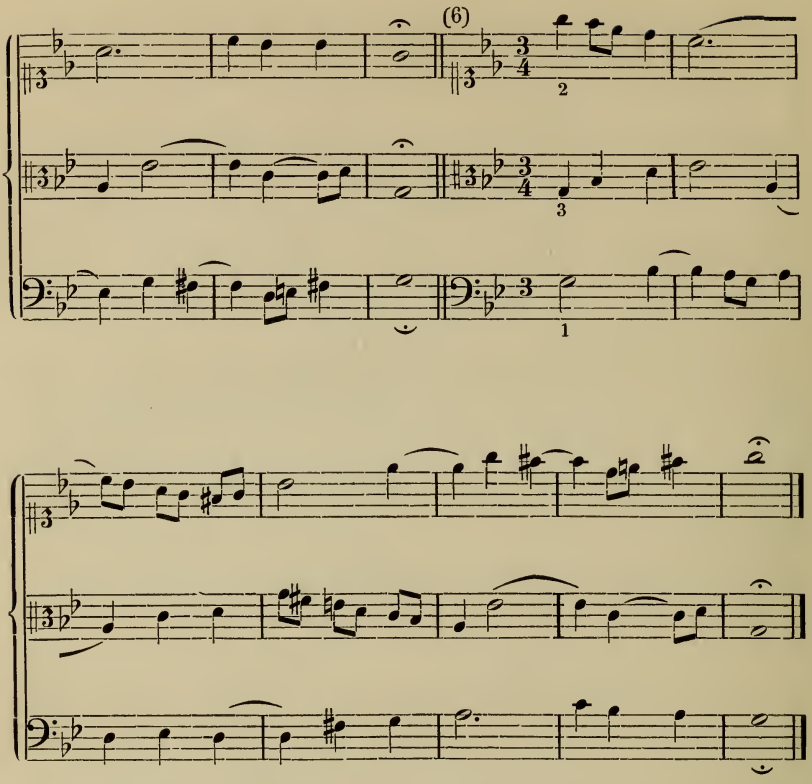

(3) c. f.
(4) c. f.


(5)
c. f.
(6)
c. f.

The inversions are here made in regular order. But is obvious that the *c. f.* may be set in either part in the original exercise, and that the inversions may then follow at will. It is on the whole easier to set the *c. f.* at first in the bass, and proceed as above; this plan may be adhered to until practice has given a certain degree of skill and accuracy in constructing such exercises in half and quarter-notes. The *c. f.* can then be set in the soprano or alto; or the student may go on to exercises in figurate counterpoint, of which the following is a sample:

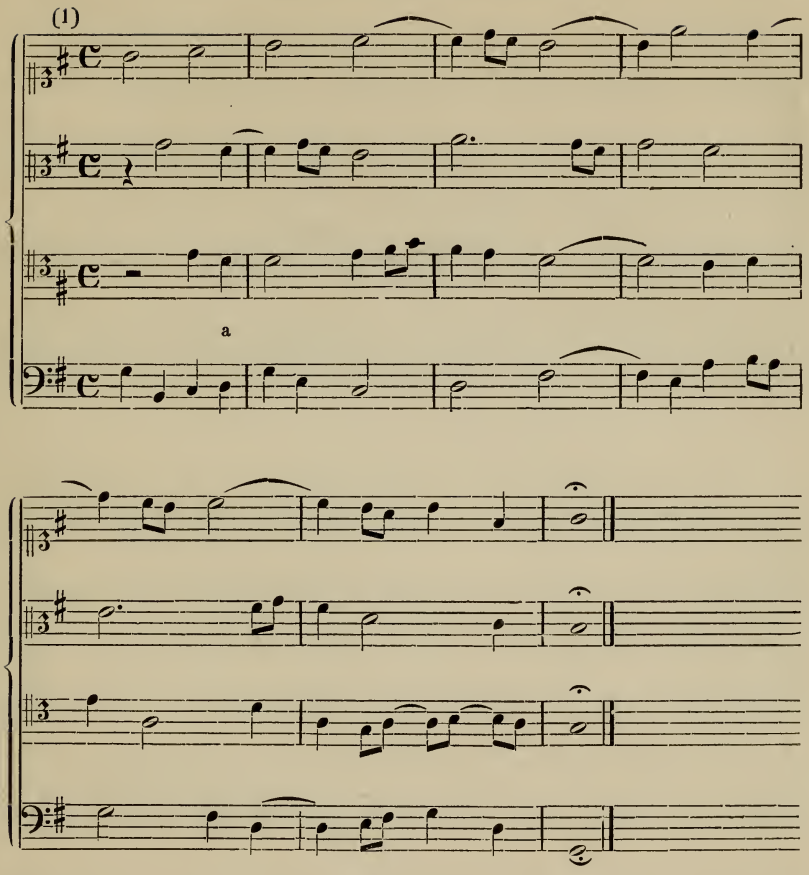



(3)
(4)
(5)



The part numbered 1 is the *c. f.*, 2 is the invertible counterpoint to the same, and 3 the added part; this last is no longer a *free* part, (as in three-part *double* inv. counterpoint) but must be written, in its relation to the other two, according to the rules of invertible counterpoint of the octave, thus producing an exercise in *triple* invertible counterpoint. This added part may likewise be introduced above or between the two others.

For writing in *quadruple* invertible counterpoint in the octave the rules already enumerated must be observed. If these have been thoroughly learned (and it would be useless to proceed further when this is not the case) it will be unnecessary to begin these exercises by practice with a simple *c. f.* in whole notes. Figurate counterpoint is therefore chosen for the first example:



This example, or any other written under the same rules, can be inverted in 23 different ways; *i. e.* the parts may assume, counting the original example, 24 different positions:

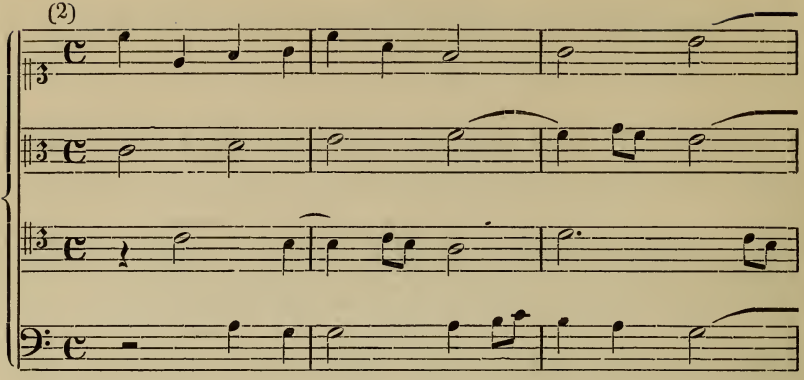
1 1 1 1 1 1	2 2 3 3 4 4	2 2 3 3 4 4	2 2 3 3 4 4
2 2 3 3 4 4	1 1 1 1 1 1	3 4 2 4 2 3	3 4 2 4 2 3
3 4 2 4 2 3	3 4 2 4 2 3	1 1 1 1 1 1	4 3 4 2 3 2
4 3 4 2 3 2	4 3 4 2 3 2	4 3 4 2 3 2	1 1 1 1 1 1

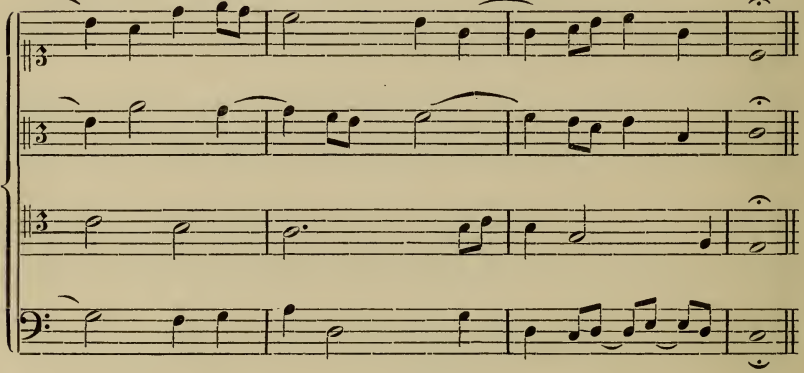
As RICHTER very rightly observes, all these inversions can never be employed in practice; it suffices if those inversions in which each part is taken alternately by a different voice, for instance:

1	4	3	2
2	1	4	3
3	2	1	4
4	3	2	1

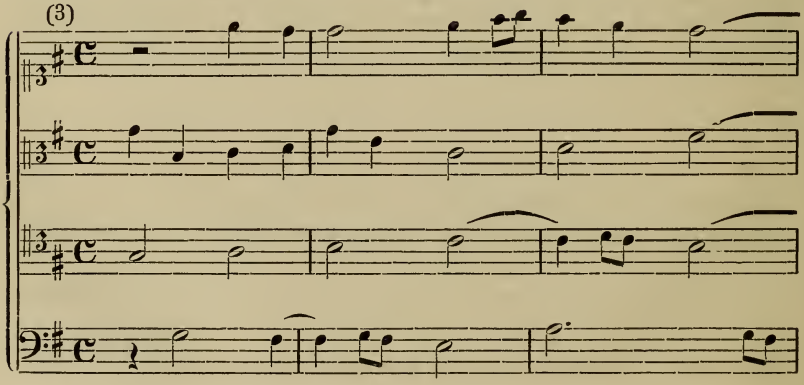
produce a good effect. The above example would then appear thus:

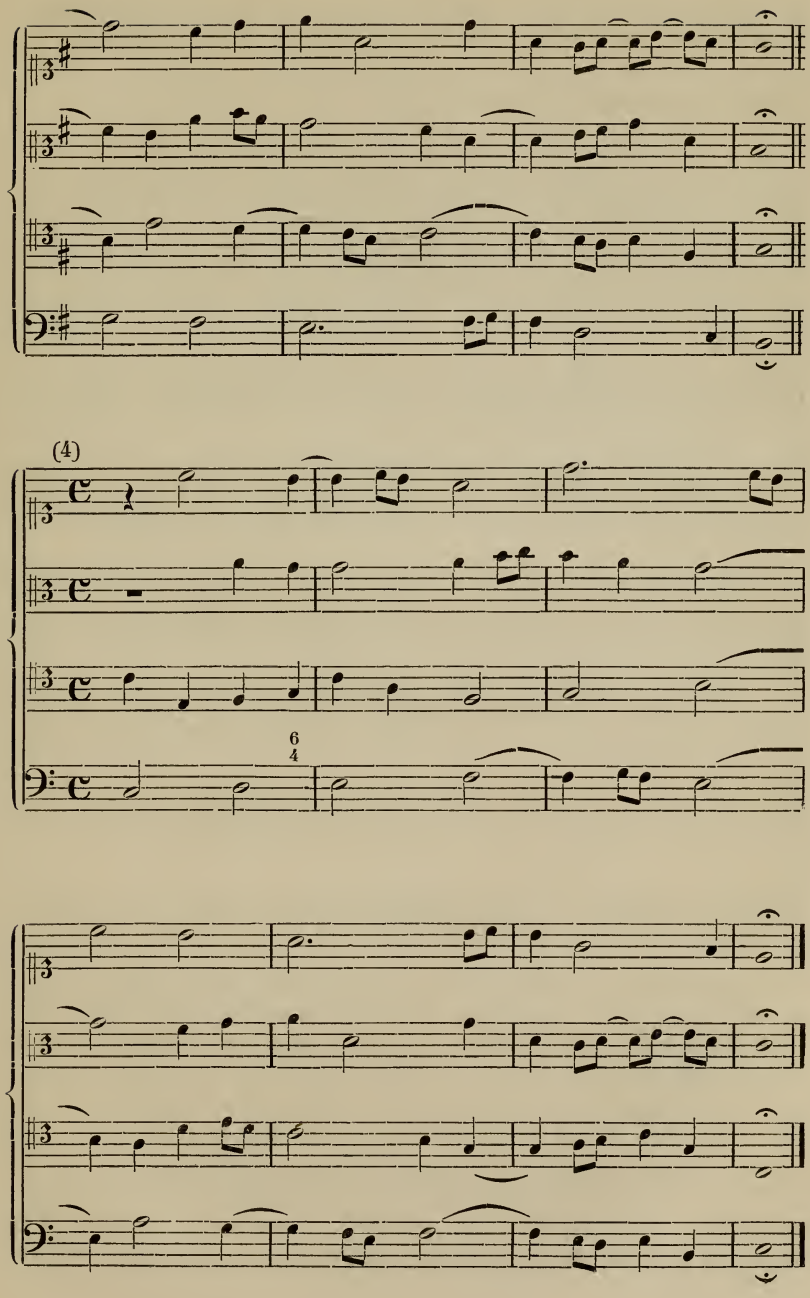
(2)





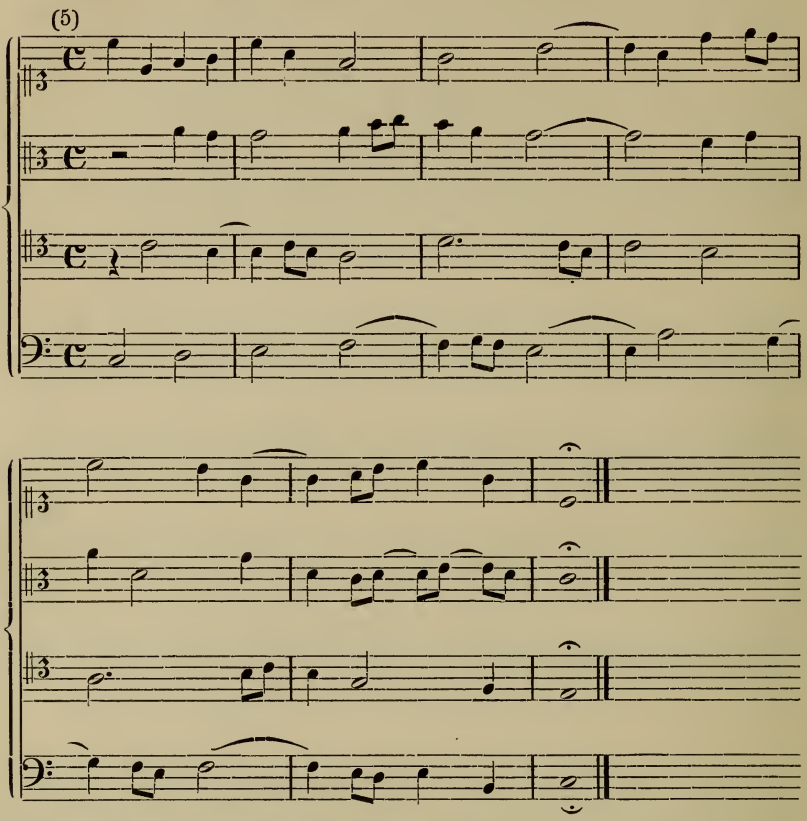
(3)




(4)
6
4

Of course, when the natural limits of any voice would be overstepped, transposition to another key becomes necessary. The most complete inversion of the original exercise $\begin{matrix}1\\2\\3\\4\end{matrix}$ is $\begin{matrix}4\\3\\2\\1\end{matrix}$:

(5)



each part being inverted in its relation to all three others. Here the original bass and tenor, as soprano and alto respectively, cross at the very beginning; which gives occasion to remark, that in the original exercise no two adjacent parts should be further apart than an octave, that the outer parts should not be more than two octaves apart, and that the first and third, and second and fourth, parts must not approach each other nearer than an octave, if crossing is to be prevented in all possible inversions. (This is, however, by no means obligatory). It is best, until considerable dexterity has been attained, to construct the exercises as simply as possible, and to avoid wide skips in any of the parts. All sus-

pensions may be employed excepting those of the ninth and major seventh with the simple resolution to the octave; even these have no ill effect in certain inversions. Through a liberal use of suspensions is gained, not only greater variety, but often also an easy way of escaping disagreeable chords of the $\frac{6}{4}$ in many inversions. The $\frac{6}{4}$ in ex. 4, resulting from the inversion of the triad on the fifth degree (*a*, ex. 1, first measure), is here innocuous; it occurs on the arsis, follows the tetrad on the second degree, and its fifth *d* is prepared in the preceding chord; through this combination of circumstances its peculiar modulatory force is so weakened that the progression to C: I_7 produces no unpleasant harmonic effect. The leading of the tenor in the last measure of ex. 1, and the final resolution by substitution of the second *a*–*b'* (between tenor and soprano) should be noticed.

Finally, a word as to the method of working out the exercises. In ex. 1 the soprano was the *c. f.*; to this the alto was first set as invertible counterpoint, and to these the tenor and bass were then added together, this mode appearing the most convenient under existing conditions. But as the harmonic possibilities of all possible exercises are simply infinite, this procedure would not be so easy in all cases; in some it may appear preferable to set the *c. f.* and accompanying counterpoint as middle parts, and to add a bass and soprano; or to divide them, writing one or two parts between; or three parts may be written out simultaneously. This must now be left to the discretion of the student himself. If the four inversions exhibited in full above give a good result, he may be satisfied at the beginning.

CHAPTER VIII.

Invertible Counterpoint of the Tenth and Twelfth.

The inversion in the octave could be performed with ease, and with comparatively few restrictions. This is not the case with any of the remaining varieties of invertible counterpoint. When a melodic phrase is inverted, in its relation to another, by a ninth or a tenth it gives, not only a contrasting harmonic effect, but a totally different, we might say unexpected, one. That such new and strange combinations may be eminently effective in certain situations shall not be called in question; but it is equally undeniable that the mere mechanical difficulty attendant upon writing in most of these styles is so great, that the results obtained scarce-

ly compensate for the time and labor bestowed upon the work. Besides, these results are, in the nature of the case, highly artificial, and cramped and confined through a necessary observance of otherwise superfluous rules. The study, and, more particularly, the employment in practice of many of these forms of invertible counterpoint, have therefore been latterly neglected; of all six varieties only two, namely those in the tenth and twelfth, now receive any special attention; for the employment of the rest is dependent upon so many conditions and subtle mathematical calculations as to make them practically useless. A brief analysis of the two varieties above mentioned will therefore attain the object of this chapter.

These two are, in their proper sphere, (the canon and fugue) remarkably effective, being of high importance in thematic development and variation. Their use in counterpoint pure and simple being very limited, their peculiarities will be here presented with as great brevity as is consistent with clearness.

Invertible Counterpoint of the Twelfth (Fifth).

Two melodies are to be so combined that either may be inverted by a twelfth, such inversion to give an harmonically correct movement.

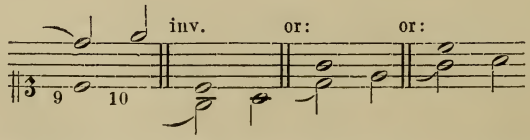
1	2	3	4	5	6	7	8	9	10	11	12
12	11	10	9	8	7	6	5	4	3	2	1

These two rows of figures show the effect of an inversion by a twelfth upon any single interval occurring between the two parts forming the original counterpoint.

Parallel motion is confined to thirds and tenths, these becoming on inversion tenths and thirds respectively.

Sixths are converted by inversion into sevenths. Where a sixth becomes on inversion a minor or diminished seventh it may be allowed to enter freely; too severe restrictions in regard to the entrance of the milder dissonances would render the construction of this movement exceedingly difficult. The examples contain numerous instances of the preparation and progression of sixths.

The resolution of the seventh by substitution is always allowable. The *ninth* must, on the contrary, be resolved *as a second*, for it becomes on inversion a fourth:



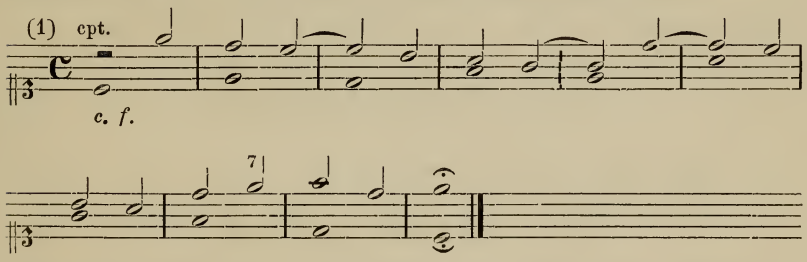
The application of these rules must be left to the student. This form

of counterpoint being decidedly more artificial than that in the octave, much has to be learned mechanically and empirically.

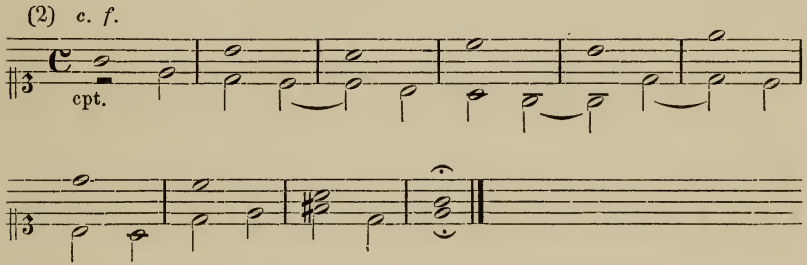
Modulation.

Any major melody transposed, note for note and interval for interval, by a fifth upward, naturally falls into the key of the dominant; and, if so transposed by a fifth downward, into the key of the sub-dominant.

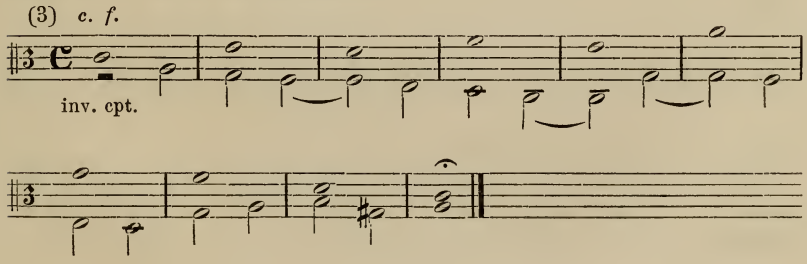
If the *c. f.* be inverted by a twelfth either way it must be transposed into the corresponding key, as in its nature it never varies.



The above shows the *c. f.* in *C*-major, the counterpoint conforming to it throughout.

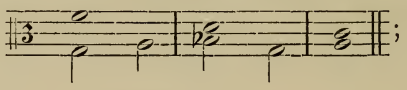


The *c. f.* is here inverted by a fifth, and the counterpoint by an octave; which double inversion is equivalent to inverting the *c. f.* by a twelfth. This latter is now in *G*-major, consequently the counterpoint takes $f'\sharp$ instead of f' in the last measure.

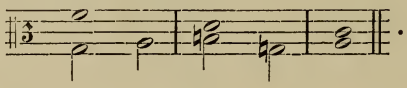


The *c. f.* is again in its first position; the counterpoint is inverted by a twelfth, and would, if considered as being in *F*-major, take *b*♭ instead of *b* in the last measure. With the counterpoint, however, greater liberties can be taken than with the *c. f.*; accidentals may be employed wherever they appear desirable. In this case an easier and more natural modulation (as coming directly after the dominant seventh in *C*-major) is to the relative minor of *C*-major. The inverted example might also close on the sixth step of the original key (*C*-major), *i. e.*, without modulating.

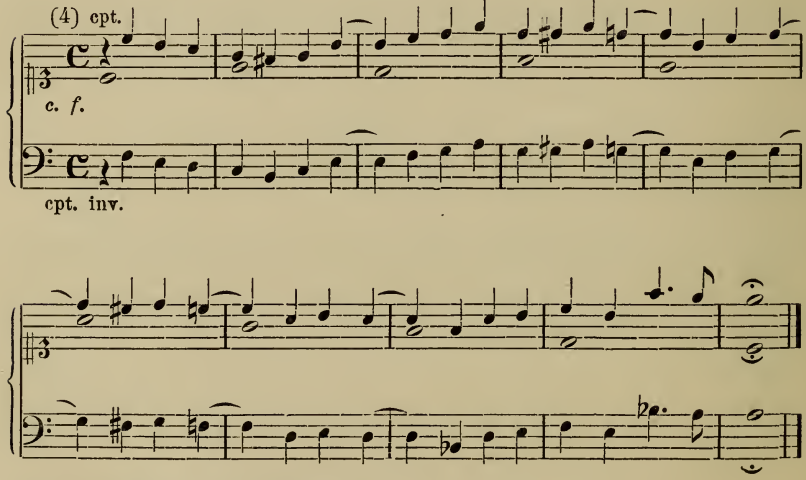
There are, therefore, four distinct ways of closing the inversions of Ex. 1: *(a)* in the key of the *dominant*, as in Ex. 2; *(b)* in the *relative minor* (*a*-minor), as in Ex. 3; *(c)* in the key of the *sub-dominant*, *e. g.*



(*d*) or in the *original key* (sixth degree), *e. g.*

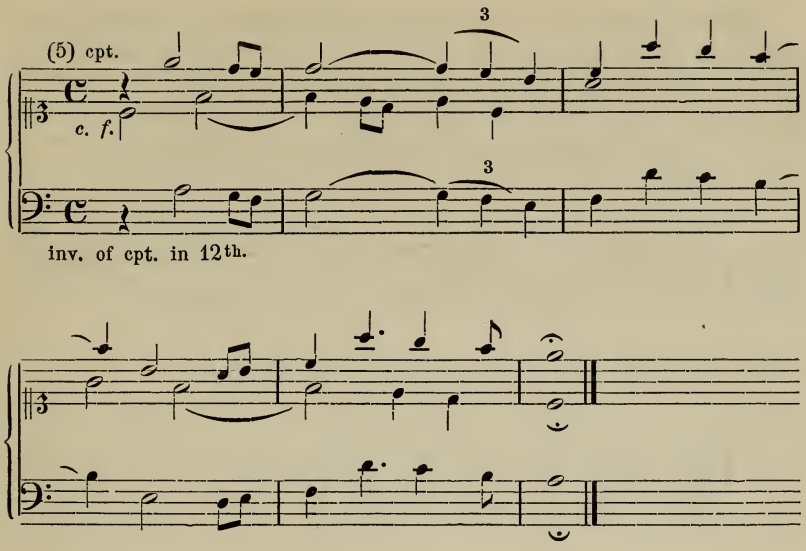


The employment of either form of close, in actual composition, is governed principally by the succeeding harmonies.



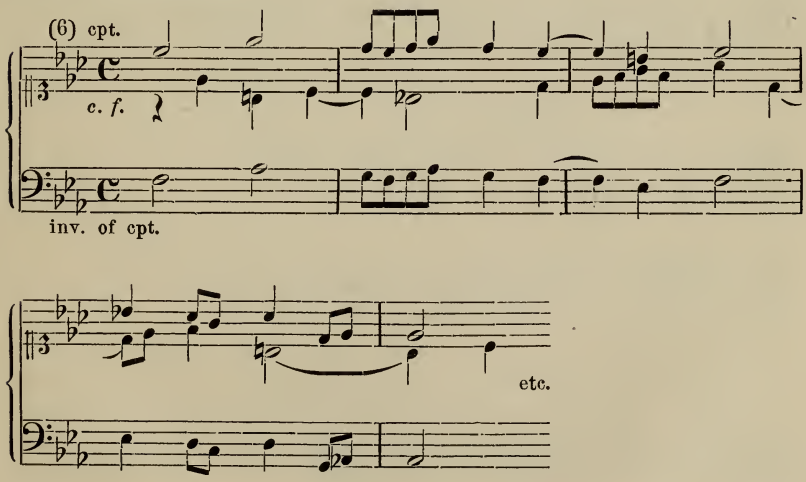
This exercise is self-explanatory.

After completing a few exercises of this description the student may proceed to figurate counterpoint, of which the following example is a specimen.

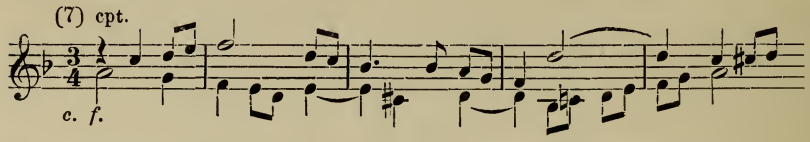
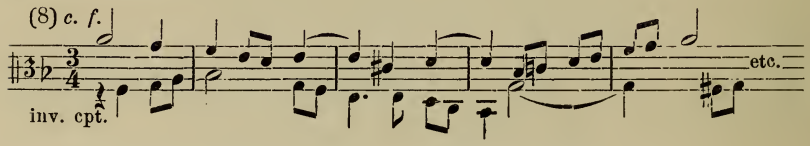
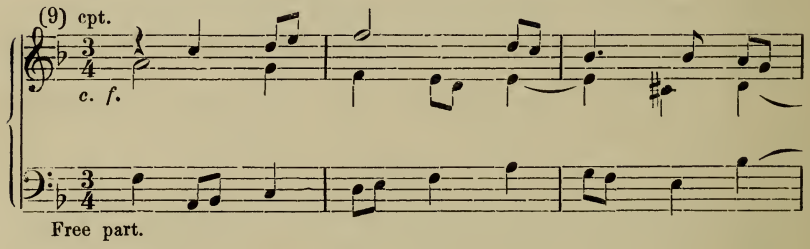
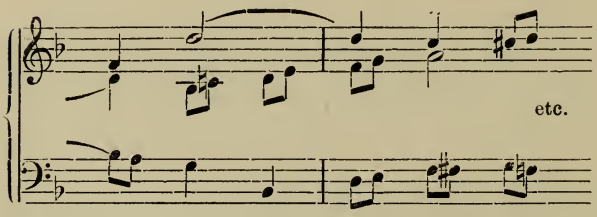


Having reached this point, he should be able to construct exercises for himself. These need not invariably begin or close on the key-note, but may be fragmentary in form, and always only a few measures in length, like the next example.

Exercises in *minor*, even when quite unpretentious, offer many opportunities for modulation.



Retarded resolutions are often of great assistance in difficult situations.

While practicing with only two parts care must be taken not to employ too many empty intervals; in other words, to write a movement which sounds agreeably when inverted as well as in the original position. Through the addition of a free third part, various limitations imposed upon the simple two-part movement may be disregarded. For instance, the following example:

or its inversion:

sounds decidedly empty. By adding a bass, as to Ex. 7:

the effect is improved.

In certain cases, left to the student's investigation, two free parts may be added. A third part may be set, in relation to either of the original parts, in invertible counterpoint of the *octave*. And if a third part be set, in relation to either of the others, in invertible counterpoint of the *twelfth*, it can also be employed together with the inversion of that part.

At all times the progression of the sixth will give most trouble, and consequently requires special attention.

To secure a flowing melodic progression in an added part, liberties may occasionally taken with the harmony like those in the first and second measures of the last example. BACH should be studied attentively; the ability to handle the separate parts with intelligent freedom will be the sure reward of faithful application. In BACH'S "Kunst der Fuge" [Leipzig, Edition PETERS] is a canon in two-part counterpoint of the twelfth (No. IV., p. 66, *Canone alla Duodecima*) which shows what may be done with this species of counterpoint in a quick movement. The same work also contains a canon in

Invertible Counterpoint of the Tenth

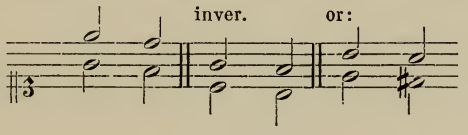
(No. III, p. 62, *Canone alla Decima*). Both are *pianoforte*-canons, not suitable for singing; but this fact renders the use of the intervals none the less interesting and instructive.

Counterpoint of the tenth is subjected to still more restrictions than foregoing.

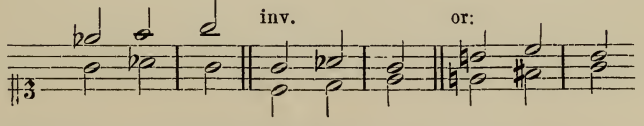
1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1

From the above formula it is apparent that we shall have to rely chiefly upon contrary or oblique motion between the parts constituting the invertible counterpoint; for the tenth becomes on inversion a prime, the third an octave, and the sixth a fifth. Parallel *sixths* may nevertheless occur when the inversion gives a perfect fifth followed by a diminished

fifth, as:

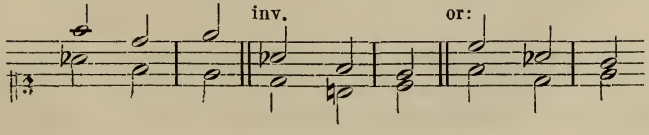


or:



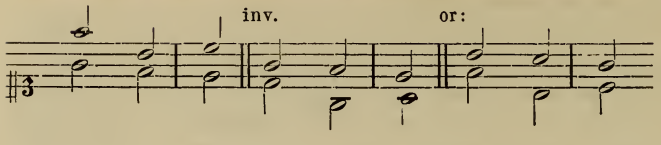
;

or a succession of two diminished fifths:

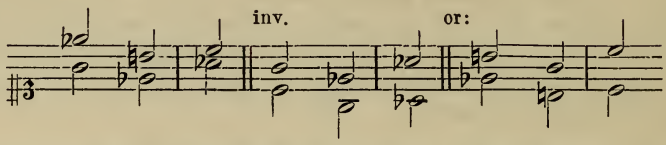


.

Also, certain combinations containing augmented intervals, *e. g.*

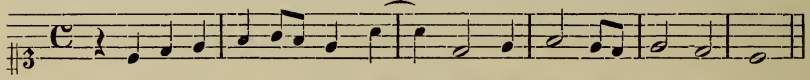


, and:

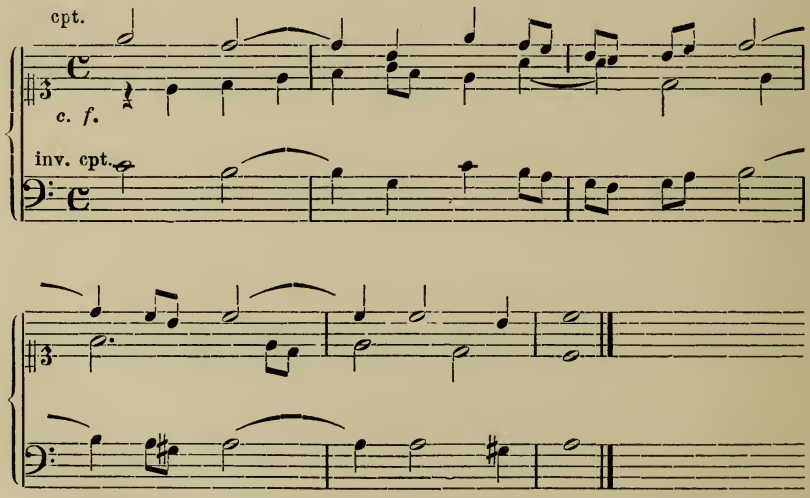


particularly when supplemented by a third part, and some chromatic passages, admit of parallel motion; but, as above remarked, contrary and oblique motion must generally be employed.

We proceed at once to a practical example, in figurate counterpoint. The *c. f.*

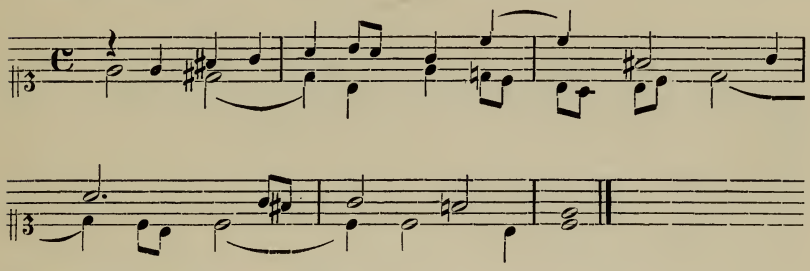


being given, a counterpoint which can be inverted by a tenth is set to the same:



It is apparent that not only the original counterpoint, *or* its inversion, may be performed together with the *c. f.*, but that the counterpoint *and* its inversion may be performed simultaneously with the *c. f.* It renders

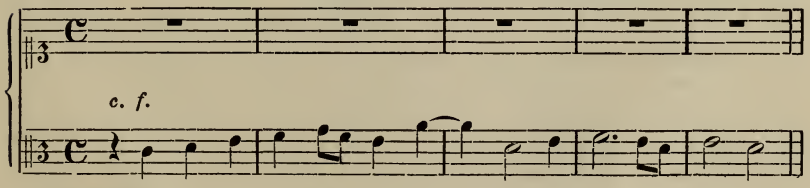
the construction of an exercise in counterpoint of the tenth much easier to note the counterpoint and its inversion together. The *performance* of all three together is of course seldom to be attempted, on account of the monotonous effect produced by the continued progression of two parts in parallel tenths or thirds. As RICHTER remarks, such a movement is employed in actual composition only when any melody, or portion of the same, is to be reinforced, that is, brought out with special distinctness.

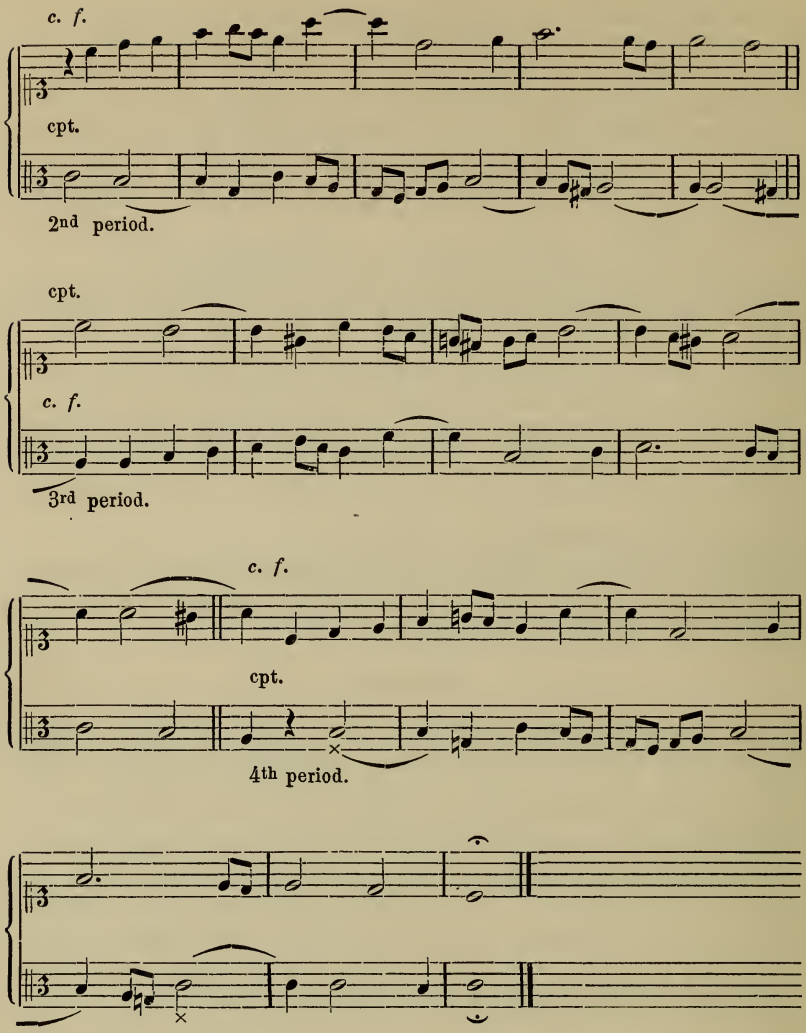
The following:

shows the effect of inverting the *c. f.*

A complete mastery of this counterpoint can not be gained by consulting a book, and learning the progressions of intervals by heart, but only through assiduous practice. The

Modulation

caused by the inversions generally carries a major melody into minor, and *vice versa*, (compare examples, also BACH's canon), for evident reasons. Now, to learn the effect of various forms of the close, nothing is better for practice than the composition of simple canons. In a two-part canon one part first gives out or "proposes" a theme or subject alone, the other part taking up the same subject after a certain number of measures. The number of measures will, at our present stage of progress, be the same as in any given exercise, in counterpoint of the tenth, which we desire to turn into a canon. For instance, from the preceding example a two-part canon may be constructed in the following manner:

Canone alla decima (a due voci).

1st period.



The second part proposes the *c. f.* as subject (1st period of 5 measures). The first part *answers* the second by taking up the *c. f.* an octave higher, the second part taking up the counterpoint as a continuation of the subject (2nd period of 5 measures). The first part now continues the answer to the second by bringing in the counterpoint; the second part continues the subject by again taking up the *c. f.*, this time in minor (3rd period of 5 measures). Till now the canon has been a strict one. But, in order to obtain a proper close, a modulation to the original key (C-major) is

effected, at the beginning of the 4th period, by slightly modifying the entrance of the counterpoint in the second part, allowing it to progress a step upward to *b* instead of a step downward to $g\sharp$; for this latter progression would have carried us into *A*-major, and put off the close indefinitely. For the same reason, another slight change is made in the counterpoint, towards the close. The modulation of the canon, being of the simplest description, can easily be followed without special analysis.

A canon divided into periods of three, and particularly of four, measures has a more decided and swinging rhythm than the above; which is, however, not necessarily advantageous.

A thorough study of this subject will include the composition of exercises in which *c. f.* and counterpoint begin and end alternately on prime, third and fifth, as each new form brings new harmonic combinations. In writing canons, care should be taken that the full close in the original key comes only in the last period, and not in an intermediate one. The *c. f.* may be modified by changing from major to minor, and *vice versa*.

The progression of the parts having the invertible counterpoint is rendered easier through the addition of one or more free parts. These may also be introduced in the canons, to produce greater fulness of harmony.

Just such canons may likewise be composed in invertible counterpoint of the twelfth.

From these canons it is but a step to the two-part fugue. The student's task will be rendered infinitely easier, his interest in works of this class awakened, and his comprehension of the same assured, by steady and thoughtful work at this juncture.

CHAPTER IX.

The Choral.

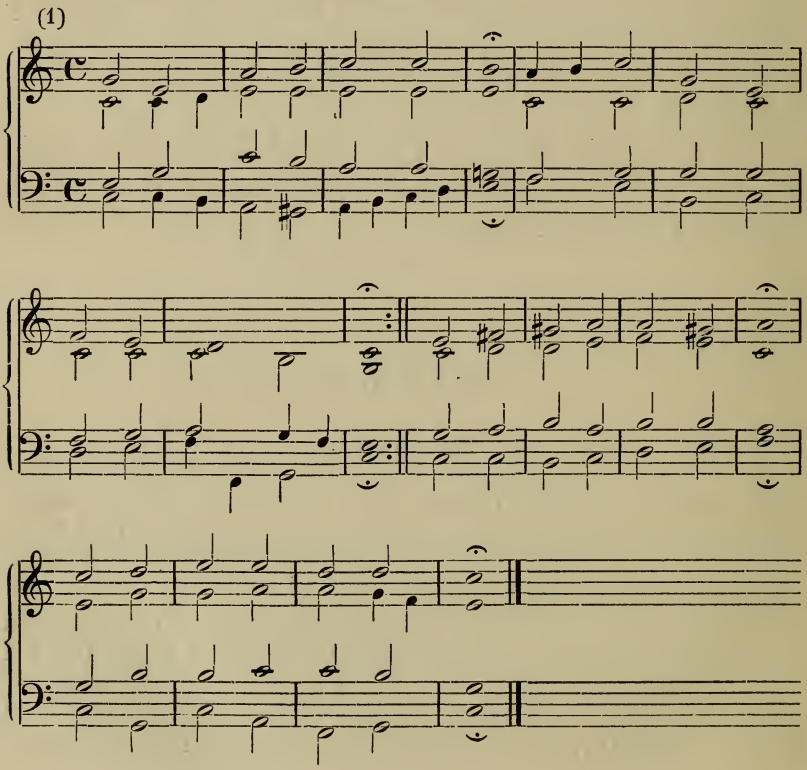
The melodies of chorals (German hymn-tunes) are very generally taken for exercises preparatory to the higher forms of counterpoint. Their brevity, simple rhythm and periodisation, and easy modulation, render them peculiarly adapted to this purpose.

Chorals may be divided into two principal classes: (1) those written in the old church-modes, and (2) those in the modern keys. This not being an historical treatise, but a manual of modern counterpoint, the former class must be left to the student's own investigation, which will hardly be confined to the choral, but must, if undertaken at all, embrace more

extensive compositions, notably of the PALESTRINA epoch. [PALESTRINA's complete works are published by Breitkopf and Härtel, Leipzig, from whom single volumes or full sets may be obtained]. It is enough to say here, that in chorals in the church-modes [compare PAUL's Manual of Harmony, Appendix] the opening and closing harmonies (in which the leading-note is sometimes lacking) often require a peculiar treatment best learned by studying well-harmonized examples, as Nos. 1, 7, 8, 9, 12, etc. in SAEMANN's Book of Chorals.

The harmony of the modern choral in four parts, as set for congregational singing, while full, should be simple, employing frequently the three fundamental triads and their inversions; on the one hand free from tedious harmonic repetitions, and, on the other, with no attempt at figurate ornamentation beyond an occasional quarter-note, where its introduction tends to render harmonic transitions less abrupt, or to give the melody of any part a more natural and easy flow. Open position, where practicable, allows the higher parts greater freedom of progression. The following may serve as an example:

(1)



This choral ("Jesus, meine Zuversicht") is divided into four periods (= metrical divisions), the first, third and fourth being periods of four measures each, and the second a period of five measures. The close of each period is marked by a *fermata* (𝄐).

The final close should generally be a *full* one; only in rare instances *plagal*; and always in the key of the tonic. (Melodies in the church-modes form the principal exceptions to these rules). The close at the end of the repeat, or of any principal division, is also most frequently a full one in the key of the tonic; if another be chosen it must of course permit of a smooth and correct progression, not only forwards to the next period, but also backwards to the beginning; for instance, the close on the dominant triad. Parallel fifths and octaves *over the fermate* are inadmissible.

Imperfect or half-closes are most appropriately introduced as subordinate closes at the end of the first and third periods; or, in chorals of less regular metrical form, at the end of any subordinate division.

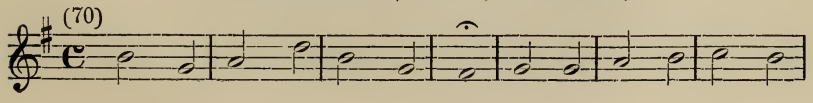
The modulation of major chorals is generally to the relative minor, or to the key of the dominant; occasionally to that of the subdominant or (transiently) to other nearly related keys. Minor chorals modulate to the dominant key, the relative major, etc. All modulations must be easy and natural, in no case forced or far-fetched. Where no special modulation is indicated by the melody, one should be introduced in the accompanying harmony, in the second half at least. Chromatic progressions should be used only in case of necessity, as for instance when the melody of the choral makes diatonic modulation difficult, or in order to prevent monotony.

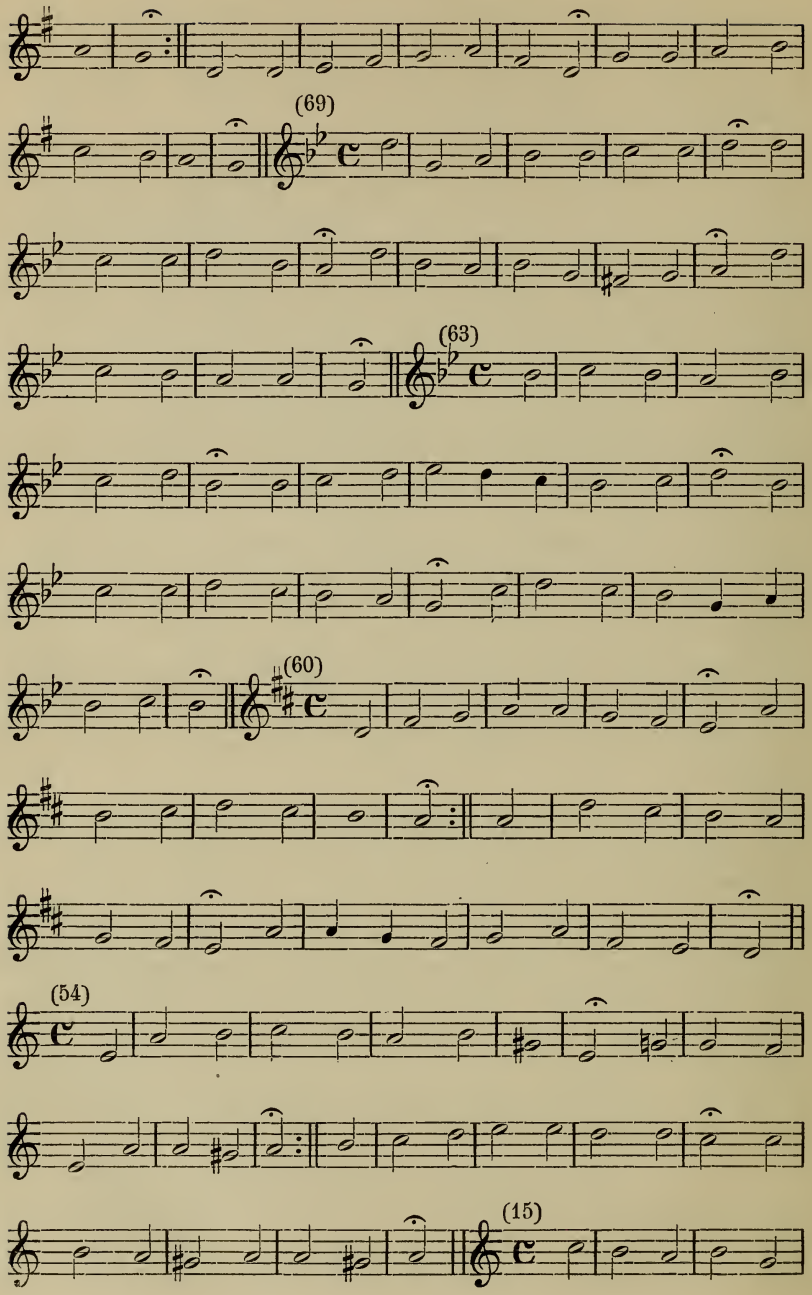
The best discipline for the student is, to take up some standard book of chorals (that by SAEMANN, Leipzig, Breitkopf & Härtel, is one of the best), and carefully read eight or ten of those in the modern keys, noting the three principal points: simplicity of harmony; manner and *situation* of modulation; formation of closes; then to harmonize the melodies given below, setting them in the soprano, and afterwards comparing the results with those in the book. As with other exercises, the choral melodies should be worked out with different harmonies (compare SAEMANN, 87, and BACH, 175, 338.)

The bass must always be varied and flowing, as also the soprano; less care need be bestowed, in this particular, on the middle parts.

6 Choral-Melodies (according to SÄMANN.)

(70)

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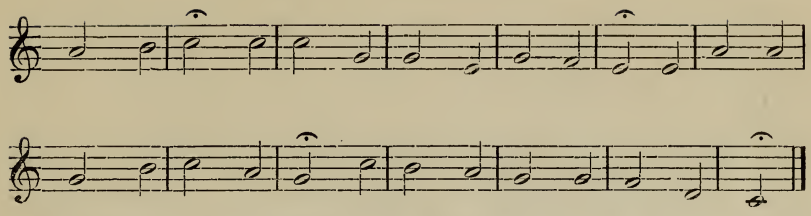
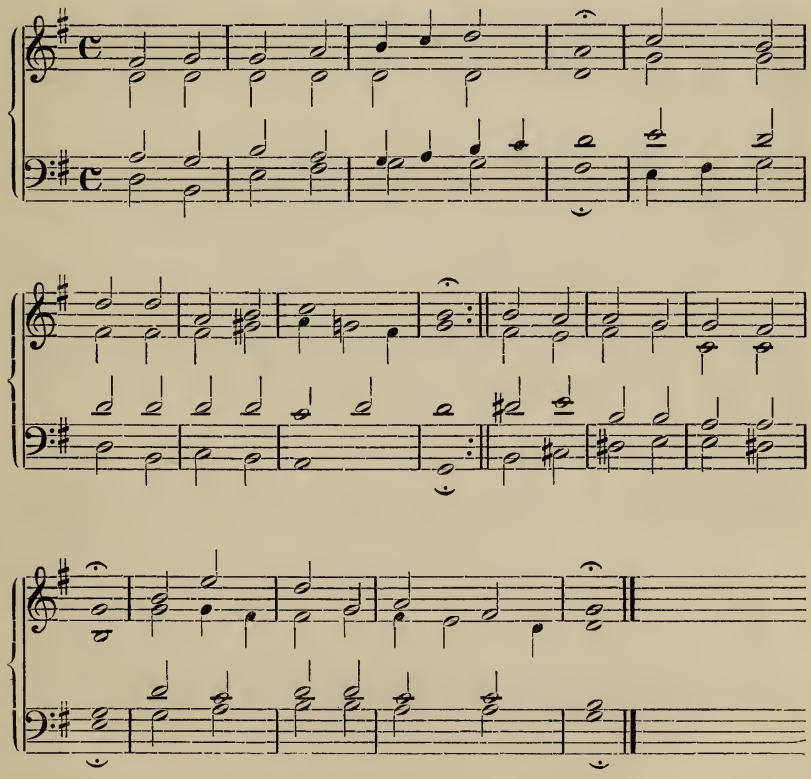
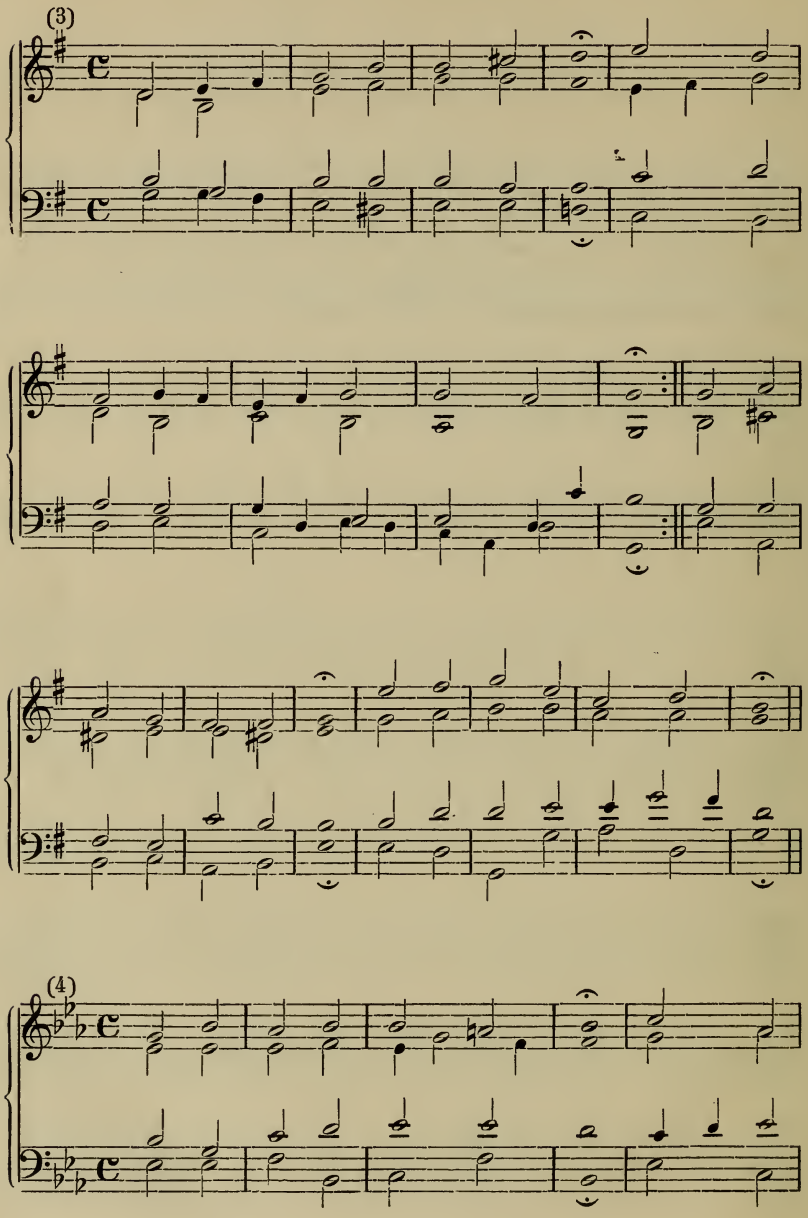


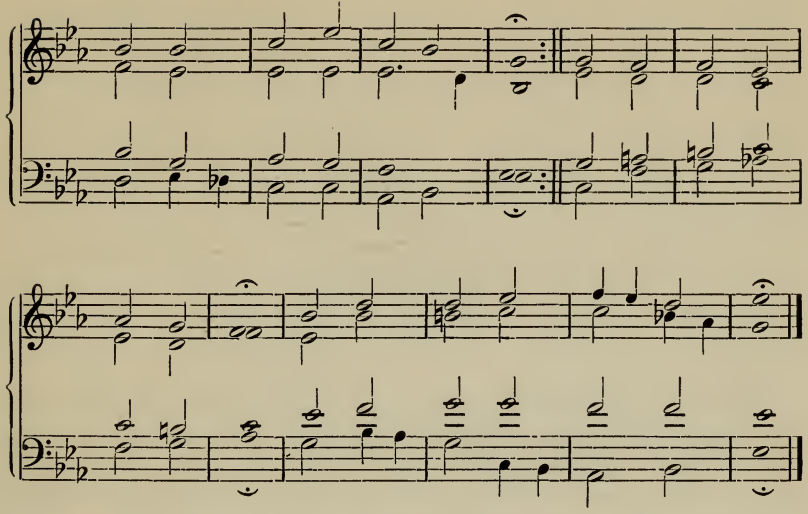
In further exercises with chorals the melody is first to be set in the bass, then in the alto, and finally in the tenor. With the last two forms greater freedom of modulation, and in the employment of quarter-notes, may be allowed. If a melody set in the bass begin on the third or fifth instead of the tonic, the opening harmony may be the tonic chord of the sixth, or the dominant chord, as in this example:



But the chord of the tonic must then be brought in as soon as possible, and in such a manner as to render the character of the key unequivocal.

The parts should not cross except where this is really necessary, as in ex. 3:





last measure of second period, the tenor crossing the alto to supply the dominant seventh, and the still more important tonic third.

From these examples the transition to the figurate choral is easy. In this latter the movement in quarter-notes is kept up by one or the other part throughout. Particularly to be guarded against is a sing-song, jingling rhythm: BACH's 371 Choral-Songs should be sedulously studied in this connection. If it appear desirable, exercises with quarter-notes similar to those explained in four-part simple counterpoint may be constructed, taking any choral melody as *cantus firmus*.

APPENDIX.

Note I. Our word Counterpoint is derived from the Low Latin *contrapunctus*. This latter originated from the circumstance that notes were written at the inception of contrapuntal style as mere dots or *points* (*puncti*), and that in the first rude attempts at combining two distinct melodies each note or "point" of the one was thus opposed by a "point" in the other — *i. e.* point against point = *punctus contra punctum*. The attention of those interested in the subject is called to Dr. Hugo Riemann's "History of Musical Notation" [Studien zur Geschichte der Notenschrift], Leipzig, Breitkopf and Härtel; a scholarly and reliable work.

It is not improbable that the antiphonal songs of the early Christian church gave the first impulse to the endeavor to combine two different melodies. The earliest essays in this direction were made about the twelfth century. Franco of Cologne was among the first (1190?) to try to reduce the harmonic relations subsisting between the *discant* (*discantus*, as the counterpoint was then named) and the *tenor* (from *tenere*, to hold — the given or invented melody to which the discant was set) to a system. The *tenor* is called *cantus firmus*, or fixed melody, because it always remains unchanged amid the varying harmonies of the *counterpoint*, *i. e.* the free part or parts set to the *cantus firmus*.

Note II. The great progress made in the science of counterpoint during the struggle between the ancient and modern systems of harmony, and the fact that the many treatises written by the learned gave rise to innumerable dissensions, called into being a host of scientific terms, most of which were pedantic in the extreme, and are now obsolete. "Equal" and "unequal" counterpoint (*contrap. aequalis et inaequalis*) may still survive, for the sake of convenience and brevity. Equal counterpoint is that in which notes of strictly equal duration are opposed to each other in the *c. f.* and free part or parts; in unequal counterpoint notes of different values are opposed to each other.

Note III. The simplest rhythmical form is that in which tones or other audible sounds follow each other at precisely equal intervals of time, and without difference in accentuation. This might be called, for want of a better term, *monotonous* rhythm. The *measure*, in its most rudimentary form (= metrical foot), must contain two variously accented divisions, *i. e.* thesis and arsis, the stronger and the weaker accent. The first examples, in equal counterpoint, are given in monotonous rhythm, that is, entirely irrespective of metrical accentuation. They might just as well be imagined in half, quarter, or eighth-notes without bars, and in any *tempo* from *largo* to *andante*. They are written in whole notes for the sake of convenience and uniformity; and the bars are used merely in order to present each interval distinctly by itself. The entire section on two-part equal counterpoint is written with the express intention of exhibiting simple progressions of intervals, without confusing the student by continual references to, and limitations respecting, rhythmical position. The formal scheme or arrangement of the section devoted to simple counterpoint is an abbreviation of CHERUBINI'S method.

Note IV. *Cantus firmus.* The literal meaning of this term is "fixed melody", *i. e.*, a melody which remains unchanged in whichever part it is set, being repeated note for note and interval for interval, whatever harmonic variations may be written to it in other parts. The Gregorian church-melodies very often served, at the commencement of contrapuntal evolution, as such *cantus firmi*, and resembled those till now given for exercises in being composed of tones of equal length. This is, however, as the above definition of the term implies, no essential attribute of a *cantus firmus*.

Note V. The practice of noting all compositions in slow time in whole or half-notes and in quick time in eighth, sixteenth, or even thirty-second-notes, might at first sight appear more logical than the now customary method. But the notes themselves do not express a *positive degree* of celerity, but only a *comparative relation* (to each other). The ability to indicate any desired *tempo* with the greatest exactness by means of the metronome, together with the inconvenience in writing, and clumsy appearance of, the old method, have completely overturned this latter, which was already discarded by BEETHOVEN. The old notation is still occasionally found, and the ancient nomenclature, with its demi-semi-quavers and hemi-demi-semi-quavers, still lingers, but will soon be ousted by the more intelligible and precise terminology of modern musical science.

INDEX.

A cappella composition 2—3; compared in effect with piano 2, 15, 91, 115.

Accent, accented division of measure, see *Thesis*.

Alto, range 2; clef 2, 3; used as harmonic filling 25, 121.

Answer, 66, 67; of subject in canon 118.

Anticipation 21.

Arsis 18, 58—61, 127; successive entrance of parts on 21, 34, 38, 53; pairs of eighth-notes on 65; chord of fourth and sixth on 86—87, 109.

Augmented intervals in *a cappella* comp. 3; resolutions of 12, 15—17.

BACH, JOH. SEB., progressions in works explained by Principle of Substitution V—VI; 371 Four-part Choral-songs 44, 125; incomplete resolutions 44—45, 52; choral: "Ein' feste Burg" 63—64; "Kunst der Fuge" 115.

Bass, range 3; leading of 25, 90, 121; crossing other parts 83, 89, 99.

BEETHOVEN, discards old manner of notation 127.

BRAHMS, uses *C*-clef in *a cappella* comp. 3.

Broken chords in counterpoint 38.

Canon and fugue 1, 110; inv. cpt. of Tenth and Twelfth in 110; by BACH for pianoforte 115; construction of *c. a la decima* 117—119.

C-clef 3, 8.

Changing notes 23, 38—39.

CHERUBINI 12; on successive entrance of parts 38, 53; method of counterpoint 127.

Choral 119—125; BACH'S *C.*-songs 44, 125, "Ein' feste Burg" 63—64.

Chromatic progression *vs.* diatonic 3, 38—39; in chorals 121.

Clefs 2—3.

Close in 2-part cpt. 5; unsatisfactory, with invert. cpt. 89; unprepared entrance of dissonances towards the 33; with inv. cpt. of the Twelfth 112; in chorals 121.

Contracted resolution of maj. seventh 11.

Contrary motion 5; importance of 27.

CORNELL, J. H. 10.

Counterpoint: defined 1; comp. with Harmony 1; sub-divisions of 1; simple or single 1, 4—75; invertible or double 2, 76—119; two-part 4—25; figurate 58; derivation of word 4, 126; double, triple, quadruple invertible *C.* defined 81—82; *c.* of the Tenth and Twelfth 109—119.

Covered fifths 7, 26—27, 49; 97.

Crossing of parts 7, 40, 49, 77, 78, 81, 83, 89, 98, 99, 108, 124—125.

Cross relation 16, 33.

Diatonic progression *vs.* chromatic 3, 38—39; in chorals 121.

Diminished intervals 15—17.

Discant 126.

Dissonances, entrance of 10, 15, rule for in rhythmical composition 18;

see also *Preparation* and *Resolution*.
Dominant third, doubling of 47.
Double counterpoint, see *Invertible*.
Double invertible cpt., defined 81; in 3-part movement 82—94, in 4-part m. 94—98.
Double substitution, resolution by 44, 48.
Doubling intervals 27; dominant third 47.

Eighth-notes, how employed 63—65.
Equal counterpoint 4, 126.

Fifth, perfect, in 2-part cpt. 5—7, 77, in successive measures 22—23, 32, 33; covered *f's* 7, 26, 49, parallel 97, 98.
Figurate counterpoint 58—75.
Florid counterpoint, 63.
Fourth and sixth, chord of the, in invert. cpt. 85—86, 98, 109.
Fourth, perfect, in 2-part cpt. 7, 77; parallel ("open") *f's* 27, in invert. cpt. 82—83, 96—98.
FRANCO of Cologne 126.
Free imitations 65—75.
Free leading of cpt. 23, 33, 114—115.
Free part in double inv. cpt. 89—94, in cpt. of the Twelfth 114, of the Tenth 116; in canon 119.
Fugue, with canon, highest contrap. form 1, 110.
Fundamental treated as inverted ninth 25, 33.

G-clef, supersedes *C*-clef 3.
Gregorian church-melodies as *c. f.* 127.

Harmonic equality of prime and octave V, 9, 40, 42—44.
Harmonic filling, alto as an 25, 121; free part not an 94.
Harmony, differs from Counterpoint 1, 46.
HAUPTMANN, MORITZ, Theory of Interconnection V; definition of chord of the ninth 11; allows free entrance of augm. second and dim. seventh 15; main characteristic of invert. cpt. 90—91.

Imitation, defined 66.
Imitations, free 65—75; strict 66—67, rhythmical 66—73; in canon 117—119.
Indirect resolutions 19—21, 92.
Instrumental passages *vs.* vocal 3, 115.
Interconnection of chords, Principle of Substitution based upon V, 10.
Inversion in the octave 76—77.
Invertible (or *Double*) Counterpoint 1, 2, 76—119; varieties of 76; of the Octave 76—109, double, triple, quadruple invertible cpt. 81—109; of the Tenth and Twelfth 109; of the Twelfth 110—115; of the Tenth 115—119.

Leading-note 32; doubling of decried by theorists 47; in church-modes 120.
Ligature (= tie) retards resolution 20.
LUTHER, MARTIN, choral: "Ein' feste Burg" 63—64.

Measure, elementary form of 18, 127; subdivisions of 58, 61.
Melodic phrasing of cpt. 3, 24, 38—39; *preparation* 33, 39, 68; *minor scale* 32.
Modulation, caused by flatted changing notes 23, by flatted leading-note in minor 32, by chord of the $\frac{6}{4}$ 85—87, 98, 109; in invertible cpt. of the Twelfth 111—112, of the Tenth 117—119; in choral 120, 121.
Motives 65—74; distinction bet. *m.* and subject 68.

Ninth, resolutions of in 2-part cpt. 11, 40—42; chord of defined by HAUPTMANN 11; in invert. cpt. 77—78, 82—83; fundamental treated as inverted *n.* 25, 33; invert. cpt. of the Twelfth 110.
Notation, Dr. H. RIEMANN'S History of 126; old and new 127.

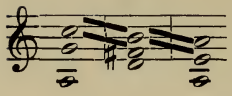
Octave, in 2-part cpt. 5; harm. equal to Prime V, 9, 40, 42—44; parallel

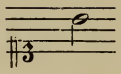
("open") octaves 27; in successive measures 22—23, 39; covered *o's* in inv. cpt. 97.
Open fourths and octaves 27.
Organ-point, in chord of the ninth 11; *cantus firmus* as an 23.
PALESTRINA 120.
Parallel motion 5, skips in 6, 12, 14; in all parts together 27, inv. cpt. of the Twelfth 110, *fourths* and *fifths* 7, 27, 82—83, 96—97; *thirds* and *sixths* 5, 39; *octaves* 27; *thirds* and *tenths* in inv. cpt. of the Tenth 116—117.
Passing notes 19—21; on thesis 19, 24; *seventh*, minor 23.
PAUL, OSCAR, Manual of Harmony V, 2, 10, 120.
Perfect intervals in 2-part cpt. 5—7, 18—19.
Period, in canon 118—119.
Phrasing of cpt. 3, 38, 39, 59.
Piano compared with voice 2, 15, 91—92, 115.
Polyphony synon. with Counterpoint 1.
Preparation of dissonances 4, 8—10; by substitution 9—10; entrance of diss. without 15, 33, 39, 50, 68; melodic *p.* 33, 39, 68.
Prime, preparation through 9; equal harm. to octave V, 9, 40, 42—44.
Quadruple invertible cpt. 82, 104—109.
Question and answer 67.
Repetition 66; of melodic figure 32, 39.
Resolution of dissonances 10—17; indirect 19—21; retarded 20—21, 92; by substitution 12—14, 40—45; by double substitution 44, 48; in inv. cpt. 78.
Retarded resolutions 20—21, 92.
Rhythmical imitation 66, 73.
Rhythmic character of 2-part equal cpt. 127; of unequal cpt. 18, 127; of figurate cpt. 58—65; of invertible cpt. acc. to HAUPTMANN 90—91.
RICHTER, E. FR., employment of inversions in pratice 105, in cpt. of the Tenth 117.
RIEMANN, Dr. HUGO, "History of Mus. Notation" 126.
SAEMANN, "Book of Chorals" 120, 121.
Score, writing exercises in 3.
Second, regular resol. of 10, 42; by substitution 40, 42; leading of in *a cappella* composition 91—92; free entrance of *augm.* 15.
Seventh, minor, regular resol. 10, led upwards 23; *major*, regular resol. 10—11; by substitution 12—13, 41—42; so-called "contracted" resol. 11; leading of in *a cappella* compos. 91—92; resol. to fifth in 2-part cpt. 7, 114, in 3-part cpt. 39, 114.
Simple (or *Single*) Counterpoint 1, 4—75.
Sixteenth-notes, how employed 64—65.
Skips in parallel motion 6, 12, 14; with rapid eighth-notes 65.
Soprano, range 2; clef 2, 3; leading of 25, 121.
Strict imitations 66—67.
Strict and *free* styles VI.
Subject, musical 7, 65; of canon 118.
Substitution, Principle of V—VIII, 9; see also *Preparation* and *Resolution*.
Successive fifths or octaves 18—19, 22—23; entrance of parts 21, 34, 38, 53.
Suspension 20; of ninth in inv. cpt. 77—78.
Symphone 10.
Syncopation 53, 59, 61; importance of in inv. cpt. 90—91.
Tenor, range 2; clef 2, 3; derivation 126.
Tenth, invertible counterpoint of the 109, 115—119.
Tetrad 11.
Theme, see *Subject*.
Thesis 18, 58—65, 127; contrariety of *t.* and arsis (= syncopation) in inv. cpt. 90—91.
Three-part counterpoint 25.
Tie, retards resolution 20.

Triple inv. cpt. 82, 98—104.
Trombone, noted in *C*-clef 3.
Twelfth, invert. cpt. of the 109, 110—115.
Two-part counterpoint 4—25.
Unequal counterpoint 18, 126.
Unison at beginning or close 5, 28; in the midst of exercise 28.
Viola, noted in *C*-clef 3.
Vocal comp. 2—3; *music* compared in effect with piano 2, 15, 91—92, 115; *passages* comp. with instrumental 3.
Volkmann, Robert, leading of second and seventh in *a cappella* comp. 91—92.

Wagner, Richard, leading-motives 65.

Errata.

Page 27, line 14 read 

,, 32, ,, 2 from below, supply ♮ before 

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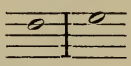
,, 46, staff 2 leave out the slur between 

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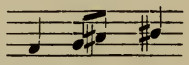
,, 75, line 2, first measure should read 

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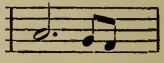
,, 116, third exercise fourth measure should read, thus 

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